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Recoupling
The driver of Human Success

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Abstract

This article's point of departure is that most of life's challenges are collective challenges, to be addressed through collective action that can be successful only when people act beyond enlightened self-interest. This is the opposite of the methodological individualism that underlies mainstream economic and political analysis. The core idea is that to address our collective challenges, we need to coordinate our collective capacities at the scale and scope at which these challenges occur. As our challenges vary through time, often unpredictably, our capacities are continually in danger of becoming decoupled from our challenges. Thus, human survival and flourishing depend on our success in continually recoupling our capacities with our challenges. Such recoupling invariably involves not just cooperation (working with others to achieve one's own goals), but also collaboration (working with others towards common goals). When individuals collaborate, they participate in the purposes and welfare of the social groups in which they are embedded. Recoupling deserves to become a central guide for public policy, business strategy and civic action.

Introduction

The basic idea of this article is simple and surprisingly powerful: Most of the challenges we face in life are collective challenges, from the personal level (where we pursue most of our goals in webs of social interdependencies) all the way to the global level (where we confront such problems as biodiversity loss, pandemic preparedness, and misinformation). We address collective challenges by coordinating our actions. This coordination requires that our collective capacities—psychological, social, political, technological, and economic—be aligned with our collective challenges. Such alignment promotes human flourishing, understood multidimensionally to encompass eudaimonic wellbeing (living a life of excellence, virtue and purpose, e.g., Ryan and Deci, 2001), psychological wellbeing (including mental health, prosocial relationships, personal growth and agency, e.g., Ryff, 1989), fulfillment of human potential (across various dimensions, including emotional and intellectual, e.g. Maslow, 1954), social wellbeing (including embeddedness in one's chosen social groups, a sense of social justice, e.g., Seligman et al, 2009), and economic wellbeing (access to enabling resources to achieve material sufficiency, e.g. Sen, 1999).

Our collective challenges are diverse. They differ in scale, from the large scale of climate change to the small scale of family rifts. They also differ in scope, involving threats to and opportunities for our social belonging, personal empowerment, material livelihoods, and environmental health. *To address our collective challenges successfully, we need to coordinate and align our collective capacities to meet the scale and scope at which our collective challenges occur*.

Since both the scale and scope of our collective challenges evolve with the passage of time, our collective capacities are continually in danger of becoming decoupled from these challenges. Accordingly, *our collective capacities must continually be recoupled to our ever-changing collective challenges*. I call this the *recoupling thesis*. This recoupling drives human success and ensures that we remain adapted to our environment to pursue our flourishing. As such, it deserves to become a guidepost for public policy, business strategy, and civic action.

To make headway in understanding how our collective capacities become aligned with our collective challenges, we need to distance our thinking from the individualism that dominates much of economics and political science. In mainstream economics, methodological individualism is a fundamental principle asserting that economic phenomena can be explained in terms of the actions of individual agents (e.g., Robbins, 1932). Furthermore, rational choice theory (portraying decisions as made by individual rational actors) plays a central role in economic analysis (e.g., Becker, 1976). In political science, individualism is a core tenet of liberal political thought, which emphasizes individual rights, liberties and autonomy (e.g., Mill, 1859). Social contract theorists such as John Locke explored the idea that individuals enter into a social contract to secure their individual rights and interests (e.g., Locke, 1689). As in economics, methodological individualism is used to analyze political behavior and institutions by examining the actions of individual agents (e.g., Elster, 1989).

In the conventional economic paradigm, individual decision makers have their own predetermined, individual economic preferences, beliefs, perceptions, and skills upon which they base their individual economic decisions, in the context of a probabilistically determinate environment. Economic markets equilibrate their decentralized demands and supplies. Macroeconomic activity is simply the sum of all individual economic activities. Social welfare is the sum of individual welfares. This paradigm rests on an assumed bottom-up causality, ignoring the top-down influences of social norms, values and identities.

Because of these default assumptions, within which conventional economics is situated, collective capacities come to be viewed as the sum of individual capacities, and collective challenges become the sum of individual challenges. Similarly, in conventional political analysis, citizens have their own predetermined, individual political preferences. Politicians compete for votes by seeking to represent the preferences of their constituents.

Here we adopt a different point of departure, with different default assumptions. We recognize that people live—and always have lived—in small social groups, from which larger social collectives are formed. Welfare arises not only from the satisfaction of individual goals, but also from participation in the welfare of the social groups to which an individual belongs. Consequently, an individual's preferences, beliefs, and perceptions are influenced by social interactions within social groups. Similarly, skills and other capacities emerge collectively, since most work is done in interaction with others.

Collective challenges pose threats to and opportunities for the collective flourishing of social groups. As these challenges are emergent group phenomena, they are not merely the sum of the threats to the individuals in the group. For example, global warming may be understood as an emergent group phenomenon, since (i) the release of greenhouse gases are the outcome of the interactions among people (e.g. IPCC, 2014) and (ii) the earth's climate system exhibits emergent properties (as the interactions between the atmosphere, oceans and land lead to outcomes that cannot be predicted solely from the behavior of the individual components, e.g., Alley, 2007) and (iii) global warming requires collective action (e.g., UNFCCC, 2015), supported by international agreements and thus implies a collective responsibility for mitigating climate change (e.g., Jamieson, 2015). Addressing such collective threats and opportunities requires aligning collective capacities with the collective challenge. Such alignment can arise only when the social groups have the size and scope corresponding to the size and scope of the challenges.

People make decisions in a radically uncertain environment, in which events are often not probablistically predictable. To flourish in the presence of such uncertainty, people and the groups to which they belong must remain adaptable, so that their collective capacities can become continually recoupled with the unpredictably changing challenges. This is the reason why adaptability leading to recoupling is the driver of human success.

In this article, I explore the building blocks of this recoupling thesis. Discussion begins by dividing human coordination into cooperation (working together to achieve one's own goals) and collaboration (working together to achieve common goals), using three major features of our collective challenges: their multilevel nature, their multidimensionality and their variability. Accordingly, recoupling requires our collective capacities to be multilevel, multidimensional and flexible. Thereafter, a description follows on how to address the scale and scope of our challenges with the scale and scope of our capacities.

Contrary to much popular opinion and traditional economic theorizing, I argue that neither the market nor the state, nor some combination thereof, is sufficient to achieve our collective goals. To recouple our capacities with exisiting challenges, society must be mobilized to work appropriately with the market and the state. Within society, cooperation on its own is generally insufficient to address our collective challenges; collaboration is essential.

Thereafter, I explore how to make human coordination work, emphasizing the importance of small social groups as the building blocks of coordination across the economic, political, and social domains. The coordination of small groups is achievable through polycentric governance.

Finally, discussion turns to the mechanisms of collaboration, both internal mechanisms that work "inside the head" and external ones that operate "outside the head." Both need to work consistently in concert for recoupling to be achieved. If the social groups that generate internal allegiance are at variance with the groups that are supported externally (such as ethnic or religious groups that have identities opposed to the national identity supported by the nation state), social discord and delegitimization of democratic processes will result. A short overview is provided of major policy and business implications.

Coordination: Multilevel, Multidimensional, and Flexible

Humans are able to coordinate their collective capacities and align these with collective challenges that they face. Our collective capacities work both internally and externally. These capacities include psycho-social resources (e.g., rationality, mentalizing, empathy, compassion, trust; values, beliefs, and narratives; as well as norms, customs, practices, and heuristics), political resources (political institutions and organizations, as well as laws and regulations), and economic resources (human, physical, and financial capital as well as technologies). Each of these capacities can operate on various scales. For example, compassion can be practiced toward family and friends as well as toward strangers; political organizations can operate on local, regional, national, and international levels; and financial capital can support investment at home and abroad. Addressing collective challenges such as climate change involves the mobilization of these capacities at all scales, from micro to macro, in consonance with one another. In the G20 and G7 processes (in which I have been involved in an advisory role), the emphasis is on large-scale external mechanisms, whose effectiveness is reduced when these mechanisms do not promote the same objectives as those at smaller scale and those at work in the heads of civil society.

We interpret our collective challenges as collective threats to and opportunities for the flourishing of society. Since we face most of life's challenges collectively, aligning our collective capacities with our collective challenges promotes our flourishing.

Our ability to align our capacities with our challenges has served us well throughout history. The reason why humans have been such an evolutionarily successful species is not primarily due to our individual cognitive abilities, but because we are able to coordinate our behavior flexibly, aligning our internal and external capacities with our collective challenges (regarding internal capacities, see, e.g., Barrett, Tooby and Cosmides, 2007; and Pinker, 2010; regarding external capacities, see, e.g, Henrich, 2015); Dunbar, 1993 Dugatkin, 1999; E.O. Wilson, 2012; D.S. Wilson, 20019).

Our ability to coordinate our behavior can take the form of *cooperation* (working with others to achieve one's own self-interested goals) and *collaboration* (working with others to participate in common goals).

In what follows, I argue, first, that cooperation does not play the dominant role in the coordination of human behavior, since the pursuit of individual self-interest alone rarely, if ever, promotes systemic flourishing. In the presence of collective challenges – which are ubiquitous in human life - people who pursue their own self-interest are as likely promote the health of their social, economic, and environmental systems as are cancer cells with regard to the health of the host organism (e.g., Wilson, 2019). Second, I argue that cooperation induced solely through external mechanisms—such as laws, contracts, and policing—is rarely sufficient to address our collective challenges. (This means that, as explained below, capitalism powered by enlightened self-interest and enlightened government alone is insufficient.) Third, internal mechanisms—such as norms and values—are essential in addition. This means that *collaboration must be a crucially important driver of human coordination*. Collaboration requires decision making to take place at the level of social groups, not at the level of individuals. When individuals collaborate, they participate in the wellbeing and purposes of the social groups in which they are embedded.

A social group can be broadly viewed as any group whose members are in persistent interaction with one another, regardless of whether these interactions are maintained primarily by psycho-social forces or by economic and political institutions. For collective challenges to be addressed, the

purposes and capacities of social groups must be aligned with these challenges. When this alignment takes place, people participate in the flourishing of their social groups.

The three major features of collective challenges in human affairs are as follows:

1. *Multi-dimensional*: Human flourishing is multi-dimensional and thus the scope of collective human challenges (i.e., the threats to and opportunities for flourishing) are multi-dimensional. For example, the scope of the collective challenge from climate change may be understood as a threat to solidarity (when climate change disrupts communities), agency (when climate change reduces our ability to shape our lives through our own efforts), material gain (when climate change raises the cost of producing goods and services), and environmental sustainability (when climate change disrupts self-regulating ecosystems). Similarly, the scope of the collective challenge from financial instabilities may also be viewed in such terms, since financial crises undermine informal community support systems, disempower the people who lose their fortunes, reduce material wealth, and sap the state's financial resources for environmental services.
2. *Multilevel* : Collective challenges arise at many different scales. For instance, there are local challenges, such as air pollution in cities, which call for local policies to promote clean energy and reduce emissions from transport and industry. There are also micro-social challenges, such as family dysfunction, which call for coordination among family members. National challenges, such as inequality and social injustice, call for national coordination through policies to improve social mobility, to promote equality of access to education and healthcare, and to reduce poverty. Regional challenges, such as conflicts in the Middle East, call for coordination that may involve, the negotiation of peace agreements and provision of humanitarian aid. Finally, there are global threats, such as climate change, biodiversity loss and resource depletion, pandemics, international financial instability, cybersecurity, and international terrorism. Global threats can only be addressed effectively at the worldwide level. (Needless to say, challenges at multiple levels are often in interaction with one another.)
3. *Temporally variable and unexpected*: Many collective challenges change over time. For example, extreme weather events (e.g., droughts, floods, storms, heat waves) are inherently variable, and each requires diverse coordinated responses. Pandemics are variable in terms of their transmissibility, lethalness, and mutability. In addition, collective challenges often occur unexpectedly, which makes coordinated responses difficult, if not impossible, to plan for in advance. Collective action generally requires decision making under radical uncertainty.

For people to thrive, they must be able to address the multiple scales, dimensions, and variability of collective challenges through corresponding features of their collective capacities (to be explained in greater detail below):

1. *Multi-dimensional coordination*: We have capacities to act in multiple dimensions, such as through prosociality (requiring the exercise of social solidarity), niche construction (calling for the exercise of agency), material sustenance (often requiring transactional skills) and environmental service (requiring regenerative participation in the natural world). To satisfy social needs, people coordinate their actions through communities, such as religious communities that span the globe. In addition, information is shared globally through scientific networks and the internet. Coordinating these capacities plays a key role in maintaining social order and resolving conflicts (Fiske, 1992). We can satisfy our agentic needs, individually and collectively, by making our own economic, political, and social choices. Democratic systems allow participation in the policy process of large populations, while international organizations such as the United Nations and the G20 provide platforms for coordination on issues such as sustainable development and international security (Keohane and Nye, 2011). Our material needs can be satisfied through the production and exchange of goods and services, usually in a decentralized manner (Acemoglou and Robinson, 2012). Our environmental needs can be addressed through coordinated actions in various settings, such environmental conservation programs. Needless to say, having the capacities to act in multiple

dimensions does not guarantee that coordination will take place in the appropriate dimensions for addressing our collective challenges. For example, we can share information as well as disinformation and pandemic risks; we can exercise prosociality at the national level but not at the international level in response to climate change; and so on.

2. *Multi-level capacities*: We have the capacities to act at multiple scales. For example, during the COVID pandemic, the World Health Organization coordinated efforts to develop and distribute vaccines and treatments across countries, while governments of individual countries worked to slow the spread of the virus by implementing lockdowns, travel restrictions, and social distancing aided by the help of local groups and individuals. The Paris Agreement on Climate Change, adopted by nearly all countries worldwide in 2015, set forth a framework for global cooperation to reduce greenhouse gas emissions and mitigate the impact of climate change, while individual countries commit to reduce their emissions and participate in financial transfers (from developed to developing countries) to support mitigation and adaptation efforts under a system of nationally determined contributions. Emission reductions cannot happen without microlevel compliance by business, households, and civil groups. The United Nations' Sustainable Development Goals is a framework for global action on poverty, hunger, health, education, gender equality, clean water and sanitation, clean energy, reduced inequalities, and other goals; in response, many countries have developed their own national strategies to achieve these goals. Social movements, grassroots organizations, and citizen-led initiatives address local problems, such as sustainable consumption and production, poverty, and inequality are also addressed. The highest levels of human coordination take place in much larger numbers than other primates, which enabled humans to develop complex societies undertaking large-scale projects. The evidence for this is large, (e.g., Dunbar, 1992, 1993) and is supported by research in communication (e.g., Tomasello, 2019), cultural evolution (e.g., Boyd and Richerson, 1985), social structure (Henrich, 2015), cross-cultural cooperation (e.g. Gächter et al, 2010) and institutional mechanisms (e.g., Ostrom, 1990).
3. *Flexible capacities*: Humans can coordinate their actions flexibly in scale and scope in response to changing environments in a variety of ways, from informal social networks to complex global organizations. Other primates are known to collaborate in specific ways and limited numbers, such as in hunting and defense; however, human collaboration is more diverse and complex (Melis, Hare and Tomasello, 2006). This flexibility arises from a confluence of cognitive and cultural abilities, including symbolic thought, language, intentionality, and conceptualization of imagined futures. These abilities have enabled humans to adapt to changing environments, spread into a wide variety of ecological niches all over the world, and develop new technologies to survive in new environments (Boyd and Richerson, 2004). Humans are also able to share knowledge more flexibly and effectively than other primates and transmit systems of knowledge from one generation to the next that evolve in response to changing circumstances (Henrich and Boyd, 1998). In the wake of natural disasters, humans have shown remarkable flexibility in providing relief and support. After the 2010 earthquake in Haiti, for instance, international aid agencies collaborated with local community groups to provide emergency shelter, food, and medical care (UN Office for the Coordination of Humanitarian Affairs, 2010). After Hurricane Katrina in 2005, a wide range of organizations and individuals worked together to provide aid and assistance (FEMA, 2013). Such coordination is also vital for global health threats, such as pandemics and emerging infectious diseases. The Global Outbreak Alert and Response Network (GOARN), for example, brings together a network of organizations and experts to provide rapid response to disease outbreaks and other health emergencies (World Health Organization, 2021).

Our ability to align our collective capacities with our collective challenges, in both scale and scope (including our ability to recouple our capacities with our ever-changing challenges), is crucial to human flourishing. Attempting to tackle collective challenges at the wrong level leads to failure: tackling climate change through independent national initiatives is inadequate. Similarly, tackling

multidimensional collective challenges by addressing just a single dimension (e.g., addressing climate change through economic support but not through social support for collapsing communities) is also inadequate.

Addressing the Scale of Collective Challenges

As our major collective challenges arise at multiple levels, from micro to macro, the appropriate coordination of our activities requires that we first recognize the scale at which each collective challenge occurs and then align our capacities with the challenge at that level. This means that global challenges, such as climate change, require coordination of global collective capacities; regional challenges, such as regional armed conflicts, call for regional coordination; national challenges, such as immobility, require national coordination; local challenges, such as urban renewal, necessitate local coordination, and family challenges, such as marital dysfunction, require family coordination.

The alignment of the scale of collective challenges with the scale of collective capacities is illustrated in Figure 1. The bidirectional arrows indicate that the variability in the scale of our challenges needs to be matched by the flexibility in the scale of our capacities in order for recoupling to occur.

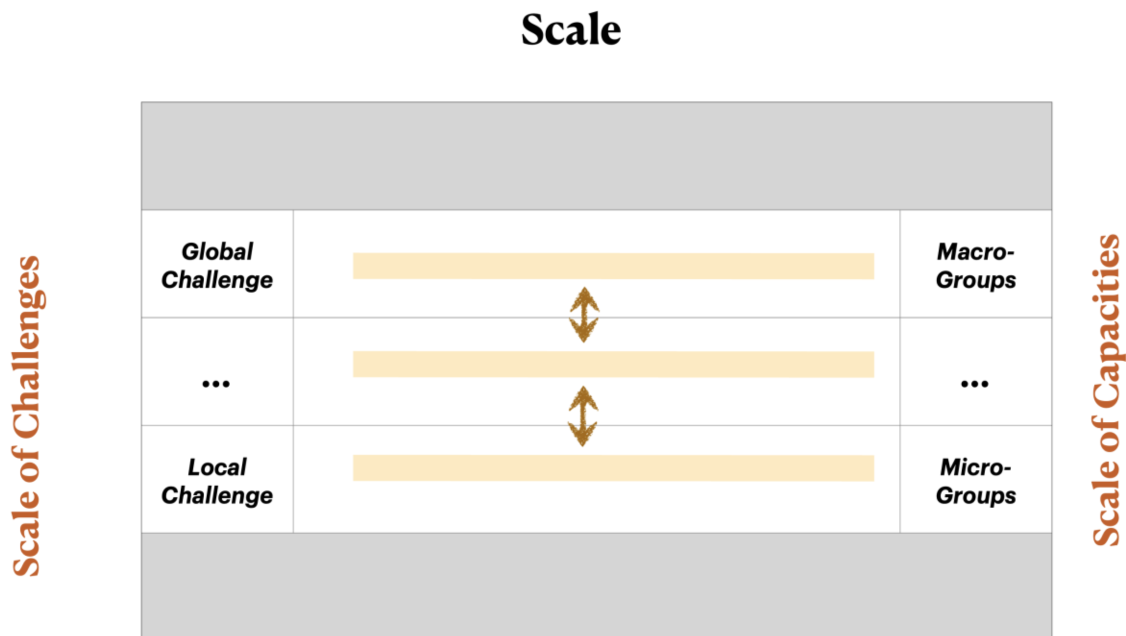

Figure 1 Scale Recoupling

The coordination of capacities involves both cooperation (through international and national laws) and collaboration (adherence to social conventions and moral values, as well as prosocial participation in social groups, from micro to macro). Since humans live predominantly in small social groups from which larger groups can become constituted, collaborative scale alignment involves the formation of groups-of-groups, each with a common sense of purpose, to address the collective challenge at the appropriate scale.

To see what this means, consider the concrete example of climate action. To address the global challenge of climate change, effective action calls for relevant international agreements, whose compliance is supported in part by consonant national climate policies and (since the policing of these policies will inevitably be imperfect) in part by environmental social norms and values, as well as participation in social groups whose purposes accord with the spirit of the international agreements. It also requires action at a lower level. Urban amenities and cleanliness calls for urban regulations, supported by local groups working in the same strategic direction. This enables the regulations to

acquire local legitimacy and the local groups to generate the social solidarity and personal empowerment necessary for the successful implementation.

Stated so simply and starkly, this scale-focused recoupling thesis sounds trivially obvious. However, it has a host of implications that are neither obvious nor commonly accepted, particularly in policy making. Why then is this thesis, despite being self-evident, so contentious?

First, the proposition that human flourishing depends primarily on our collaborative ability to tackle our collective challenges runs counter to the economic individualism on which our policy thinking about market economies is based. The central rationale for the market economy is that free markets, suitably modified by government interventions to correct for "market failures," enable the satisfaction of given consumer wants at minimal resource cost. In other words, the market economy is meant to be "Pareto efficient," in the sense that it leads economic outcomes that make it impossible to make one individual better off without making another individual worse off. The consumer is "king" in the sense that the given wants of individual consumers, insofar as they are backed by purchasing power, drive the allocation of resources, production of commodities, and their distribution across consumers.

Consumer wants are conceived as the wants of individuals, whose preferences are predetermined and accepted as exogenous to the policy process. If, however, people derive their flourishing not only from the satisfaction of their individual goals, but also from the satisfaction of their social groups' goals, then a market economy that is Pareto efficient, in the sense above, is not necessarily desirable, since it fails to take into account the flourishing people get from participation in social groups that have distinct purposes of their own. Under these circumstances, a successful market economy does not merely rely on the maintenance of competition among producers to satisfy consumer wants at minimal resource cost, but also on the maintenance of social cohesion in groups of relevant scale and scope.

Second, the proposition that our flourishing depends primarily on our collaborative ability to tackle collective challenges runs counter to the political individualism on which our political thinking about democracy is based. The central rationale for democracy is that democratic government gives equal voice to all citizens on how their state is to be run, suitably modified in liberal democracies by political constraints to ensure the protection of minorities, respect for law and order, and the maintenance of checks and balances. Citizens' objectives are conceived as the objectives of individuals, whose preferences are predetermined and accepted as exogenous. "The voter is king" in the sense that the votes of individual citizens, driven by their individual objectives, drive the allocation of power and the formulation of policy. If, however, people have not only individual objectives, but also collective objectives that arise from the groups to which they belong, then a successful democracy is not just about representing the objectives of individual voters (in accordance with the "one person, one vote" rule), but also about representing the objectives ot the social groups in whose welfare these voters participate. In accordance with classical liberal principles, these both these objectives are to be represented only insofar as they do not limit the welfare of other individuals or groups. Succeeding in this regard requires maintaining the social fabric conducive to addressing the collective challenges. Since small social groups are the basic building blocks out of which larger loci of collective action can be mobilized, successful democracy will generally require policy makers to work with communities and businesses at small-group levels in order to mobilize collective capacities at the appropriate levels to address existing collective challenges.

Third, the recoupling thesis runs counter to the conventional individualistic thinking about social welfare. In particular, conventional conceptions of welfare, such as the Benthamite utility (i.e., "the greatest happiness of the greatest number"), which underlies much of economic policy analysis, position utility exclusively within an individual; thus, social welfare is viewed as a weighted sum of individual utilities. The recoupling thesis, by contrast, recognizes that flourishing often arises from tackling collective challenges through alignment with our collective capacities. Flourishing is thus not just an individual, but also a collective achievement, requiring the goals of policy to be revised accordingly (along lines explained below).

Addressing the Scope of Collective Challenges

As noted, human flourishing is multidimensional and so our challenges – the threats to and opportunities for human flourishing – are multidimensional as well. In what follows, we will consider four fundamental drivers of human flourishing: solidarity, agency, gain, and environmental sustainability (Lima de Miranda and Snower, 2020, 2022; Snower, 2018). The **scope of our collective challenges** may then be understood as threats to and opportunities these four drivers of flourishing.

The first driver of flourishing, ***solidarity***, represents social belonging and affiliation with our social groups. The importance of this driver is clear, since collaboration is crucial for tackling collective challenges and collaboration rests on participation in the flourishing of our social groups. There is ample empirical evidence that solidarity promotes flourishing. First, solidarity promotes physical health: studies have found that people with stronger social connections have better immune and cardiovascular function and longevity (Holt-Lunstad, et al., 2010). Second, solidarity benefits mental health: positive social relationships are associated with improved psychological wellbeing, lower rates of depression, and reduced mortality (Holt-Lunstad et al., 2015). Third, social belonging enhances emotional wellbeing by creating positive affect, fostering a sense of security and validation, promoting life satisfaction, and helps people cope with stress and anxiety (Baumeister and Leary, 1995). Finally, social belonging provides a sense of identity, worth, and purpose, thereby fostering personal growth, self-esteem, and a sense of living meaningfully (Jetten et al, 2014).

Solidarity may also include belief in the transcendent, that is, solidarity, interconnectedness, and wholeness encapsulated within a transcendent realm. A sense of the transcendent can enhance flourishing in a variety of ways. First, it can give people an overarching framework to make sense of their experiences, give meaning and purpose to their lives, and derive significance from their actions (Park, 2010; Steger, 2009). Second, religious and spiritual beliefs can provide comfort, hope, and resilience in the face of adversity, thereby promoting mental health and wellbeing (Koenig et al., 2012; Smith et al., 2003). Third, transcendent beliefs are often associated with values such as love and compassion which can motivate people to engage in acts of kindness, thereby promoting collaboration (Batson et al., 2003; Saroglou, 2010). Finally, the sense of the transcendent can foster a sense of collective identity and encourage collaboration to address collective challenges (Van Leeuwen and Park, 2009; Shariff and Norenzayan, 2007).

A second driver of flourishing is that which arises from ***agency***. Agency can be exercised both in one's capacity as an individual (shaping one's life through one's own efforts) and as a member of a social group (contributing to the fortunes of the group). The exercise of agency generates flourishing quite independently from the material and social gains that this activity may produce. When people have the power to make choices and act on them and when they feel a sense of control over their lives, it promotes a sense of self-efficacy and reduces their feelings of helplessness, leading to improved mental health (Bandura,1997; Deci and Ryan, 2000). A sense of agency also improves people's self-esteem and self-worth by giving them a greater sense of competence (Baumeister et al.,2003 Judge and Bono, 2001). When people feel empowered, they are more likely to set goals and gain motivation to achieve desired outcomes, which also promotes flourishing (e.g., Latham and Locke, 2007). A strong sense of agency gives people confidence in their ability to overcome obstacles, enabling them to navigate through difficult circumstances, recover from setbacks and adapt to change. The resulting resilience promotes their flourishing (Masten, 2001; Bonanno, 2004). Studies also show that a sense of agency promotes happiness and life satisfaction (Sheldon and Elliot, 1999; Diener et al., 2003).

A third driver of flourishing arises from what we will call material ***gain***, the consumption of goods and services (the conventional focus of economic analysis) as well as the satisfaction of a broader set of material needs, including physical and mental health, sanitation, shelter, food and water, regardless of whether they are transacted in economic markets. Clearly, consumption that satisfies basic needs —physiological and psychological—promotes flourishing. Once basic needs are largely satisfied, however, the material consumption that remains is largely devoted to the satisfaction of wants, primarily status wants that arise from social comparisons. The empirical evidence suggests that such

consumption can lead to increased stress, negative affective states, and reduced life satisfaction (Kasser, 2002; Dittmar et al., 2014). On the other hand, non-material forms of consumption associated with prosocial social connections and prosocial spending are associated with increased flourishing (Dunn et al., 2008; Carter and Gilovich, 2012).

Finally, our solidarity may be extended to belonging within the natural world; i.e., participation in a thriving ***environment*** (e.g., Bratman et al, 2015; Tost et al., 2019). This includes and goes beyond the utility from the consumption of environmental services. There is ample empirical evidence that nature connectedness (the extent to which individuals include nature as part of their identity), improves physical health. For example, a strong sense of belonging in nature encourages people to engage in physical activities such as walking or gardening, which contribute to improved cardiovascular health, reduced obesity rates and physical fitness. Nature connectedness promotes mental health through improved psychological wellbeing and reduced vulnerability to depression and anxiety (Bratman et al., 2019). It also reduces stress, improves concentration, and promotes cognitive restoration (Hartig et al., 2003; Berto, 2005). Third, connectedness with nature often evokes awe and wonder, which promotes life satisfaction and internal harmony (Shiota et al., 2007; Rudd et al, 2012). Finally, a sense of belonging in the natural world encourages a sense of responsibility and stewardship toward the environment, leading to a sense of meaning and purpose (Kals et al., 1999; Schultz, 2002).

These four drivers of flourishing may be summarized by the acronym SAGE, where S stands for solidarity, A for agency, G for material gain and E for environmental sustainability. Collective challenges (threats to and opportunities for flourishing) can occur with regard to each of these drivers. Political polarization, acts of discrimination and persistent economic, racial or gender-based disparities can erode social solidarity, creating the challenges of alienation and social conflict. Authoritarianism, restrictions on free expression and policies that restrict access to education, healthcare or economic opportunities undermine agency, creating the challenge of disempowerment. Economic crises and inequitable distribution resources undermine broad-based material gain, creating the challenges of poverty and inequality. Pollution, deforestation and unsustainable resource extraction undermine environmental sustainability, creating such challenges as climate change and biodiversity loss.

In the first instance, human flourishing requires the **satisfaction of fundamental human needs**. S, A, G and E can each be interpreted as distinctive needs: belonging, empowerment, consumption and sustainability, respectively, along lines to be clarified below.

In addition, human flourishing also involves the **exercise of fundamental human capacities** to fulfill these needs. Why? Because, in evolutionary terms, people who found it rewarding to develop capacities to satisfy their needs, both individually and collectively, had better chances of surviving and propagating that people who didn't. As we will see, S, A, G and E can each be interpreted as distinctive capacities: prosociality, niche construction, sustenance and regeneration, respectively.

And finally, human flourishing may also be understood in terms of **living in accord with one's appropriate moral values**. This is an aspect of flourishing since the functional purpose of moral values is to induce people to collaborate in pursuit of common purposes. In this respect, moral values induce people to exercise their collective capacities beyond the bounds of enlightened self-interest in order to satisfy their collective needs. Appropriate moral values are ones that create an alignment between collective capacities and collective needs. Here, collective needs are understood in an inclusive sense, covering all people who experience these needs. This means that the mobilization of collective capacities by one social group to the detriment of another group is not an "appropriate" exercise of moral values. As explained below, S, A, G and E can each be interpreted in terms of distinctive moral values: care, liberty, utility and stewardship.

The moral values associated with S, A, G and E cover a wide range of values that are shared across nations and cultures. For example, the value of care corresponds to Schwarz's basic values of universalism, benevolence, conformity, tradition and security (Schwarz, 1994) and to Haidt's moral foundations of Care/Harm, Loyalty/Betrayal, Authority/Subversion (Haidt, 2012). The value of liberty is associated with Schwarz's basic value of power, achievement and self-direction and Haidt's moral foundations of Liberty, and Fairness/Cheating. The value of utility is associated with Schwarz's

basic values of hedonism and stimulation. The value of environmental stewardship covers Schwarz's basic value of stewardship and Haidt's moral foundation of Sanctity/Degradation, the latter also supporting the values of care and liberty in many moral traditions.

Figure 2 summarizes these basic senses in which S, A, G and E are drivers of human flourishing.

SAGE	Needs	Capacities	Values
Solidarity	Belonging	Prosociality	Care
Agency	Empowerment	Niche Construction	Liberty
Gain	Consumption	Sustenance	Utility
Environment	Sustainability	Regeneration	Stewardship

Figure 2: Aspects of Human Flourishing

The explanation for viewing S, A, G and E in terms of distinctive **needs** is straightforward.

- *Solidarity* (S) is associated with the fundamental human need for social belonging refers to the need to connect with others, form relationships and be part of communities. The pursuit and satisfaction of this need leads to an aspect of flourishing.
- *Agency* (A) represents the fundamental need for empowerment. It involves individuals feeling a sense of control, autonomy, and master over their lives. It includes the need to shape one's wellbeing through one's own efforts.
- *Gain* (G) stands for the need for consumption, involving the use of goods and services for survival, comfort and enjoyment.
- Finally, *environmental sustainability* (E) represents the need for environmental connectedness, pertaining both to ongoing environmental services and to participation in the health of the natural world. It involves responsible resource use to ensure a healthy and viable planet for current and future generations.

Alternatively, S, A, G and E can be understood in terms of distinctive **capacities** along the following lines.

- *Solidarity* (S) is the human capacity to engage in prosociality, giving rise to behaviors that are intended to benefit others and contribute to the wellbeing of the larger community. Prosocial behaviors include acts of respect kindness and benevolence. These behaviors are crucial for building social bonds, maintaining relationships and fostering a sense of community.
- *Agency* (A) concerns the human capacity for niche construction, which involves playing an active role in shaping one's environment to suits one's needs (Leland, Odling-Smee and Feldman, 1999). This goes beyond adaptation to environmental changes and includes modification of the environment to create more favorable conditions for oneself.
- *Gain* (G) stands for the human capacity for sustenance, which denotes the ability to secure the necessary resources for survival, growth and wellbeing.
- *Environmental sustainability* (E) represents the human capacity for environmental regeneration involves the capacity to restore, renew or enhance natural resources and

ecosystems. It includes activities such as conservation, reforestation, and sustainable resource management.

The interpretation of S, A, G and E with respect to **moral values** can be summarized as follows.

- *Solidarity* (S) represents the moral values of care, emphasize the importance of compassion and lovingkindness. It involves recognizing and responding to the needs of individuals, communities and civil society. Care ethics focuses on relationships, responsibilities and nurturing connections. It is related to the philosophy of communitarianism, which argues that individuals are inherently connect to and shaped by their communities and that the social order should be grounded in communal relationships.
- *Agency* (A) is related to the moral value of liberty, covering the value of individual freedom and autonomy. It underscores the idea that individuals have the right to pursue goals, make choices and live without interference so long as they do not impinge on the opportunities of others to flourish. This value is taken up in the philosophy of classical liberalism, emphasizing the importance of individual rights, free markets and the rule of law. Classical liberals advocate the protection of private property and limited government intervention to allow individuals to pursue their own interests.
- Material *Gain* (G) is associated with the moral value of utility, which involves calculating the consequences of one's actions and making decisions that promote one's welfare. It is of course related to the philosophy of utilitarianism, which argues that the morally right action is the one that maximizes overall utility. In political contexts, utilitarianism is concerned with policies that maximize "the greatest happiness of the greatest number" (Bentham's "fundamental axiom").
- *Environmental sustainability* (E) is driven by the value of environmental stewardship, which involves caring for natural resources, preserving biodiversity and considering the long-term impact of human activities on the planet. It is related to the philosophy of eco-ethics, which advocates a holistic and ecologically conscious approach to political decision-making to promote ecological sustainability, biodiversity and the ethical treatment of non-human life.

Human flourishing requires a balance among the dimensions S, A, G and E. The nature of this balance can vary across individuals and cultures. The four dimensions are often interconnected. For example, the consumption and maintenance of solidarity requires the exercise of agency; niche construction is commonly necessary for sustenance and requires prosociality.

A central claim of this article is that *we flourish when the drivers S, A, G and E recouple our ever-changing collective capacities with our ever-changing collective challenges.*

Figure 3 illustrates scope recoupling. The scope of our collective challenges is described in terms of threats to and opportunities for S, A, G and E: alienation, disempowerment, poverty and environmental degradation, respectively. Our associated collective capacities are represented as prosociality, niche construction, sustenance and regeneration. The bidirectional arrows indicate that, as the scope of our challenges vary through time, so the scope of our capacities need to change in tandem in order for recoupling occur. Scope recoupling involves addressing the scope of our collective challenges through the appropriate scope of our collective capacities. Since the scope of our collective challenges keeps changing, scope recoupling involves reconfiguring the scope of our collective capacities in alignment with the scope of our collective challenges (as illustrated by the bidirectional horizontal arrows in the figure).

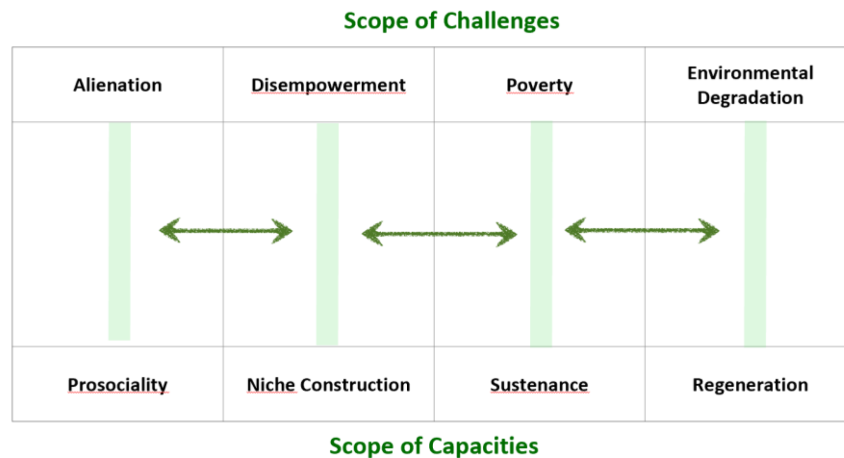

Figure 3 Scope Recoupling

The four drivers of flourishing are “on a par” (Chang, 2017) in the following sense: (a) each component of flourishing is better than others in some respects, (b) none seems to be at least as good as the others overall, in all relevant respects, and (c) there is no common unit by which they can be measured with regard to overall flourishing, though they may be comparable ordinally for decision purposes. When sources of flourishing meet these criteria, they are qualitatively different in terms of overall flourishing, but nevertheless in the same neighborhood of such overall flourishing. For example, when choices between two jobs in different disciplines (e.g., becoming a lawyer or a doctor) are on a par, then offering a slightly higher wage for one job will not necessarily make that job preferable. Such choices are “hard choices,” because “they are comparable, but one is not better than the other…nor are they equally good” (Chang 2017, p.1).

I argue that these are separate elements that drive flourishing, much as food, water, air, and shelter are needed for human survival. They cannot be readily substituted for one another to any significant degree. To thrive, people need to cover all four drivers; their basic material needs and wants, their desire to influence their destiny through their own efforts, their aim for social embeddedness, and their need to participate in the natural world sustainably. Empowerment is valueless when one is starving and consumption has limited value when one is in solitary confinement. Furthermore, the gains from empowerment, solidarity, economic prosperity, and environmental sustainability are different in kind.

On this account, it is useful to think of solidarity, agency, gain and environmental sustainability as a dashboard. Just as the dashboard of an airplane measures magnitudes (altitude, speed, direction, fuel supply) for which there is no common unit for the overall success of the flight, so the four dimensions of flourishing represent separate goals whose joint satisfaction leads to flourishing.

For our collective challenges to be tackled, each type of threat needs to be addressed through the mobilization of capacities aligned with the threat. For example, loneliness may be addressed through psycho-social capacities (e.g., mindfulness and supportive social environments), political capacities (e.g., inclusive political systems), and economic capacities (e.g., subsidies for prosocial living arrangements). The sense of disempowerment can be addressed through providing opportunities for personal growth and development, participatory decision-making processes and access to education and training. Poverty can be alleviated by modifying cultural norms that perpetuate poverty, social protection programs, and job creation schemes. Finally, biodiversity loss can be alleviated through community-led conservation initiatives, environmental education, establishing protected areas and wildlife corridors, and payments for ecosystem services. Attempting to address a collective challenge through the wrong type of capacity leads to failure. For example, tackling social alienation through the provision of more goods and services may well prove unsuccessful.

Like the scale-focused recoupling thesis, the scope-focused thesis sounds obvious; though, again, it has implications that are contentious. Let’s consider three such implications.

First, since economists usually measure prosperity in terms of material gain (such as GDP or some index of consumption-dependent utility), economics addresses collective challenges primarily through the mobilization of economic resources alone. In this context, it is still easy to overlook the possibility that collective challenges—such as climate change or pandemics—generally pose multiple threats to separate aspects of our flourishing and tackling these challenges requires the mobilization of all relevant capacities to be aligned with all aspects of these threats. For example, pandemics are not just a threat to our health, but also to our livelihoods, social solidarity, and sense of agency. Our collaborative capacities should be devoted not just to policies concerning pandemic preparedness, prevention, and response, but also to social, agentic, and environmental repercussions of these policies. In other words, alignment of collaborative capacities with collective challenges must cover scope as well as scale.

Second, the scope-focused recoupling thesis runs counter to the application of the prevailing concept of political sovereignty, which centers on "supreme authority within a territory."[1] This means that the holder of sovereignty (a king, a president, a people ruling through a constitution) has supreme authority in the sense of "the right to command and correlatively the right to be obeyed" (Wolff, 1990:20) that is, there is a mutually respected source of legitimacy. For legitimate authority to exist, there must be substantial overlap between the territory over which sovereignty is held and the borders of identity affiliation.

Though the sovereignty over a specified territory is supreme, the scope of the issues over which a sovereign holds authority may be limited. EU member states, for example, are currently sovereign regarding defense but not trade policy. Sovereignty can be circumscribed by institutions such as an international criminal court and international agreements. On this account, the sovereignty of the state is potentially compatible with the sovereignty of the individual since the latter refers to the inherent rights, autonomy, and agency possessed by each person living within a state. It is also potentially compatible with consumer sovereignty in the descriptive sense that consumers, through their purchasing decisions, control their demand for goods and services and the normative sense that consumers may be the best judge of their own welfare.

In this context, the recoupling thesis implies guidelines for the scope of issues over which different bodies are considered sovereign. In particular, these bodies comprise social groups that are coupled with existing collective challenges. As these challenges undergo change, the issues relevant to the exercising of sovereignty by these bodies should change accordingly, enabling an ongoing recoupling of human capacities with collective challenges. This application of the concept of sovereignty is at odds with prevailing notions, which assign boundaries to economic, political and social entities that ossify states of decoupling.

Recoupling in Scale and Scope

As our collective challenges keep varying in scale and scope, our collective capacities in scale and scope can become decoupled from our challenges. It is vitally important for policy makers, business leaders, and civil society to be aware of the many possible symptoms of decoupling. For example, when globalization and automation promote economic growth while leading to a sense of disempowerment and alienation, economic prosperity becomes decoupled from agency- and solidarity-based social prosperity.

Decoupling the scale of collective challenges from the scale of collective capacities occurs, for example, when national governments make unilateral decisions on climate action or when they impose nationally centralized responses to regional problems. The principle of subsidiarity provides the general guideline for the appropriate recoupling in scale: each level of government should perform only those tasks that cannot be performed at a more local level. With the onset of the Anthropocene in 1945, various economic and environmental policies that were previously addressable at a national level became appropriate at an international level. Subsidiarity promotes both agency and solidarity at scales that are aligned with the scales of the collective challenges.

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[1] See "sovereignty" in Stanford Encyclopedia of Philosophy: https://plato.stanford.edu/entries/sovereignty/

Decoupling the scope of our challenges from the scope of our capacities underlies many of the social problems that drive modern populist movements: the anger of the "left behind," the mistrust of elites, the popular support for protectionism, and strict immigration controls. Under these circumstances, economic prosperity becomes decoupled from social prosperity. When economic growth is accompanied by a decline in biodiversity, economic prosperity decouples from environmental prosperity.

We often exhibit a natural inclination to overcome this decoupling, as flourishing often arises from collaborative flexibility, or the satisfaction we get from forming new social groups to pursue a common purpose. This source of flourishing is ever-present in our lives. Our social interactions and personal relationships within our social groups are in a continuous process of change, building on the experiences of the past to forge developing bonds of affiliation in the future. Our social interactions would be tedious if they were simply reruns of what occurred in the past. Instead, we are in a continuous process of engagement with our in-group affiliates to realign our bonds of affiliation in response to the ever-changing joint tasks that we face (e.g., Goodwin, 2009). The flourishing that arises from this process may well have evolved to promote survival and reproduction in the presence of variable collective challenges.

Collaborative flexibility may be understood as a capacity to alleviate evolutionary mismatch (maladaptive behavior patterns that arose in response to ancestral environmental conditions that differ from those prevalent today). Behaviors associated with chronic stress, sedentary behavior, and social isolation often arise on this account (Nesse & Williams, 1994). People often pursue diets that give rise to chronic health problems, such as obesity, type-2 diabetes, and heart disease, which reduce wellbeing and reproductive success (Cordain et al., 2005). Rigid cultural norms, such as those that limit women's access to education and healthcare, can have an adverse effect on both wellbeing and reproductive success (Sen, 1999). In response, people can mobilize their collaborative flexibility to form new groups that address the challenge of unhealthy diets and promote women's access to education and healthcare. It is the job of higher-level entities, such as governments, NGOs, and social institutions, to create contexts whereby this potential can be realized.

Figure 4 (combining Figures 1 and 3) illustrates the requirements to recouple both the scale and scope of our co llective challenges with the scale and scope of our collective capacities. This recoupling in scale and scope is to be understood as a prerequisite of human flourishing.

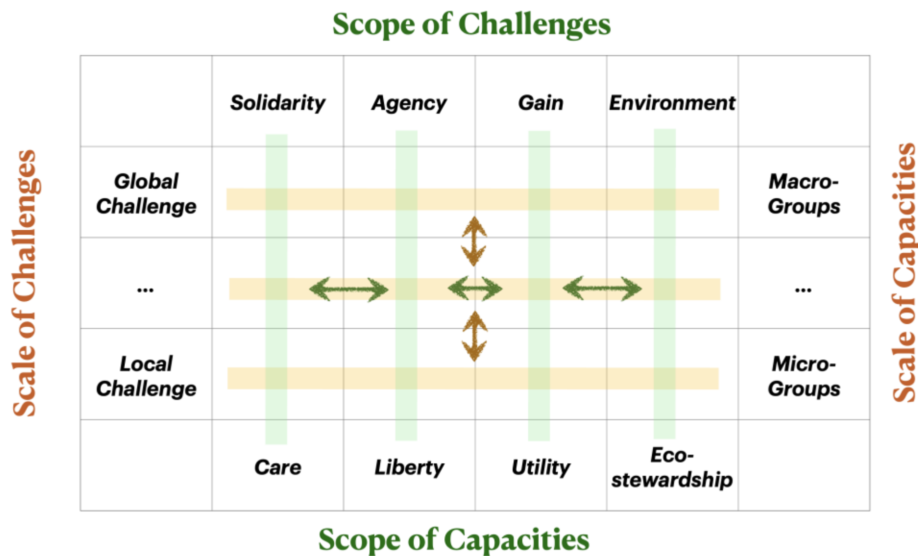

Figure 4 Recoupling in Scale and Scope

The underlying notion of flourishing is distinct from the conventional concepts of wellbeing, happiness, life satisfaction, and eudaimonic happiness.

Happiness refers to positive emotional and cognitive states, involving emotions such as pleasure, joy, and fulfillment. It is evaluated in terms of self-report measures (Lyubomirsky & Lepper, 1999; Watson, Clark, & Tellegen, 1988), experience sampling methods (Csikszentmihalyi, & Larson, 2014), and physiological measures (Davidson & Begley, 2012).

Life satisfaction focuses on an individuals' subjective appraisal of their life as a whole. It is meant to capture people's contentment and fulfillment. It has been assessed through the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin 1985), Multidimensional Life Satisfaction Scale (Pavot and Diener, 1993), and the Self-Anchoring Scale (Cantril, 1965), among others.

Eudaimonic happiness is about living a fulfilling and meaningful life. It emphasizes personal growth, fulfilling one's potential, autonomy, purpose in life, and self-actualization. It has been assessed in terms of Psychological Well-Being (Ryff & Keyes, 1995), meaning in life questionnaires (Steger, Frazier, Oishi & Kaler, 2006), and character strengths and virtues (Peterson & Seligmann, 2004.

Human flourishing, in the literature to date, is a multidimensional concept that encompasses optimal human functioning, overall well-being and fulfilment. It represents a state of thriving that covers physical, psychological, developmental, virtue-related, meaning-related, social, cultural, and spiritual aspects of life.

The physical aspect concerns the relationship between physical health, longevity, and flourishing (Diener et al., 2010; Huppert & So, 2013). The psychological aspect includes positive emotions, engagement in activities, accomplishment, positive relationships, a sense of purpose and meaning, and personal growth (Ryff, 1989; Ryff & Singer, 2008; Seligman, 2011).

The developmental aspect examines how personal growth and development promote self-improvement, learning, and realization of one's potential (see Maslow (1954) on self-actualization and Dabrowski (1964) on positive disintegration).

The virtue-related aspect is about character strengths and moral foundations of flourishing (see Seligman & Peterson (2004) on character strengths, and Haidt (2003) on moral foundations). The meaning-related aspect involves the search for meaning and purpose (see Frankl (1984) on logotherapy, and Damon (2008) on purpose as the intersection of our skills with external needs).

The social aspect highlights the importance of social connections (see Cacioppo and Patrick 2008 on the impact of social isolation and loneliness on wellbeing) as well as love and positive relationships (Fredrickson, 2013). The cultural and contextual aspects include the influence of social norms and other cultural factors on wellbeing (Veenhoven, 2000) and the role of capabilities (Sen, 1999; Nussbaum, 2000). In addition to many of the factors above, VanderWeele (2017, 2019, 2020) highlights the role of spirituality and religious engagement in promoting human flourishing.

The notion of flourishing here highlights a particularly important aspect of lives well-lived. Its point of departure is the insight that humans are social creatures: most of our capacities are collective capacities and most of our challenges are collective challenges. By implication, we flourish primarily when we manage to align our capacities in scale and scope with our challenges. In doing so, we generate meaningful lives, lived in accordance with the appropriate set of moral values. In this context, meaning – in Seligman's (2011, p. 17) sense of "belonging to and serving something that you believe is bigger than the self" – is no longer purely subjective. Instead, a life becomes meaningful when it belongs to and serves a set of collective goals that addresses one's collective challenges. Whether one's capacities contribute to the collective welfare of one's family, friends, colleagues, nation or the world at large (say, in addressing climate change) rests on one's judgment of one's capacities in relation to the collective challenges one faces, but the alignment of the capacities with challenges is not entirely subjective. If one chooses to use one's capacities selfishly to the greater detriment of others, there is misalignment and a consequent loss of meaning and moral purpose. Furthermore, alignment generally leads to physical and psychological health, personal growth and positive relationships. When the challenges change, human flourishing calls for a recoupling of collective capacities with the changed challenges.

In what follows, , I examine the conditions under which this recoupling may take place and when it fails to do so.

Why Cooperation Is Insufficient for Collective Action

It is important to recognize why cooperation (exploiting synergies with others to achieve one's own self-interested goals) is insufficient to achieve collective goals. In economics, the principle of the Invisible Hand is meant to show that economic cooperation is sufficient to generate economic efficiency. In particular, in the absence of market failures, people pursuing their self-interest in free markets manage to satisfy consumer wants at minimum resource cost. In equilibrium, making one person better off without making another person worse off is impossible. There is, therefore, no waste in satisfying consumers' wants in that case.

Market failures can arise from externalities, asymmetric information, and market power. In practice, however, these failures are ubiquitous. It suffices to recognize that humans are social creatures, embedded in personal relationships that are not coordinated through prices in anonymous markets, in order grasp the ubiquity of social externalities. Structures of power mediated through our polities generate another layer of market failures. Asymmetric information (whereby suppliers have an informational advantage over demanders or vice versa) and market power (enabling suppliers or demanders to manipulate prices in their own favor) are widespread in virtually all economic markets. Uncompensated costs and benefits arising from our environmental interconnectedness is responsible for yet another layer. This implies that the pursuit of self-interest almost never leads to an efficient allocation of resources.

Externalities are invariably generated by collective goods, comprising public goods[2] (such as pollution abatement and national defense) and common pool resources[3] (such as groundwater, tropical rainforest, or fish at high sea). Public goods are underprovided by the market operated by selfish individuals, since these individuals have an incentive to use the goods without contributing to their provision. Common pool resources are overexploited due to self-interested individuals' incentives to use them without considering the consequences for others.

Nor can the pursuit of self-interest lead to an equitable distribution of resources and commodities. The market mechanism is blind to inequities. No invisible hand mechanism exists that ensures self-interested individuals generate economic equity (e.g, Atkinson, 2015).

Why the State Is Insufficient for Collective Action

The standard response to these problems is to suggest that the state correct the inefficiencies and inequities arising from free market activities. In mainstream economic theory, efficiency can be restored through taxes and subsidies that induce people to pay for the uncompensated costs and benefits they impose on one another; alternatively, government regulations can stop inefficient behavior. But since the market failures arising from collective challenges are so pervasive and variable and taxes, subsidies, and regulations are difficult to change at short notice, it is quite unrealistic to assume that the government could be more than modestly successful in correcting market failures. (Below I indicate that, in addition, the government often does not seek to correct for market failures since economic power relations commonly beget political power relations.)

Many economic transactions are embedded in social interactions since buyers and sellers usually do not transact anonymously. On this account, social status, social norms, and identities are important influences on economic transactions. Inequities and inefficiencies in the social sphere cannot be corrected through monetary compensation since the monetization of a social interaction changes the meaning and value of the interaction (as in the case of sex, for example). One reason is that social interactions are commonly imbued with moral values, whose functional significance lies in inducing us to promote collective wellbeing *without* individual compensation. In short, uncompensated costs and benefits in the social sphere cannot be compensated in the economic sphere (Fleurbaey, Kanbur, and Snower, 2024).

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[2] Public goods are non-excludable and non-rivalrous, meaning that it is difficult to exclude people from using them and one individual's consumption of them does not reduce their availability to others.

[3] Common pool resources are excludable but rivalrous, such as fish at high sea and groundwater.

Economic theory tells us that governments can achieve an equitable distribution of commodities without loss of efficiency through lump-sum transfers, that is, transfers that do not affect economic incentives. However, since promoting an equitable distribution usually involves redistributing income or wealth from rich to poor and such redistributions unavoidably affect economic incentives (reducing the incentives of both rich and poor to generate more income and wealth), lump-sum transfers are a practical impossibility.

Furthermore, government interventions in the economy are blunt and often dangerous tools, due to a wide variety of government failures. For example, rent seeking occurs when the political process is used to obtain special privileges or subsidies, rather than to generate productive activity (such as some subsidies for fossil fuels and various agricultural products). Regulatory capture takes place when regulatory agencies become dominated by the industries they are meant to regulate, leading to regulation that benefits those industries rather than the public interest (such as some financial regulation in advance of the 2009 financial crisis). Bureaucratic inefficiency can lead to delays, misallocation of resources, and cost overruns (such as in some government-run healthcare systems).

Many of these government failures are not the result of sloppy governance or incompetent policy design; many are simply unavoidable. Since governments have the power to redistribute income and wealth, they inevitably create incentives for rent-seeking behavior. Regulatory capture often arises because industries usually have superior information about their operations, thus governments come to rely on them for regulatory purposes. Bureaucratic inefficiency is often the outcome of rules that are meant to ensure equality of treatment and to prevent misuse of public funds. Beyond this, government officials, much like private-sector agents, are often driven by self-interest, leading to inefficiencies and corruption (Buchanan and Tullock, 1962). It is unrealistic to assume that people are self-interested when they participate in the private sector but become public-spirited as soon as they enter the public sector.

Why the State Plus the Market Are Insufficient for Collective Action

A common assumption drives much of the debate between right-wing and left-wing approaches to economic policy, namely, that the government can compensate for market failures and that the market can compensate for government failures. It is alleged that economic policy design requires the "correct" combination of free-market activity and government intervention to overcome major inefficiencies and inequities. There may be differences of political opinion on what this correct combination is, with the right-wing favoring more latitude for free market activity and the left-wing favoring more government intervention, but both sides of this ideological divide implicitly agree that inefficiencies and inequities can be adequately addressed through economic markets that are tempered by government. This common assumption, however, is mistaken. It is misguided to imagine that some combination of top-down government intervention and bottom-up, decentralized market activity can solve the problems of inefficiencies and inequities.

Far from compensating for the failures of the market, government failures often aggravate them (Acemoglu and Robinson, 2012; Buchanan and Tullock, 1962; Stiglitz, 2010). One example concerns the role of government failure in augmenting the problem of market power. In a free market, firms compete with one another, and the outcome of this competition is the economic success of some relative to others. In the absence of externally imposed, exacting, ongoing constraints on their behavior, successful firms will use their dominant position in the market to increase prices, reduce quality, or stifle competition. Furthermore, they will translate their economic success into political success by lobbying the government to pass laws and regulations that benefit them, often at the expense of consumers and competitors. In short, economic success tends to lead to a concentration of market power, leading to rent-seeking, augmenting this concentration. The above-mentioned government failure of regulatory capture promotes this process. For example, the U.S. pharmaceutical industry is one of the most profitable in the world, but also one of the most heavily regulated. The high cost of prescription drugs in the U.S. has been attributed, in part, to the lobbying efforts of pharmaceutical firms, who have been accused of using their financial power to influence

policymakers and regulators, resulting in laws and regulations that protect their monopolies and prevent competition.

Another example of government failures aggravating market failures concerns the handling of asymmetric information. Free markets are often characterized by asymmetric information. For example, firms may have access to information about production costs or consumer demand that is not available to its consumers, competitors, or the government. This allows them to set prices above competitive rates, resulting in inefficiencies. In the presence of such an information advantage, the government may become reliant on these firms to provide the information required for the incentivization or regulation of their activities. The resulting tax-subsidy schemes and regulations are likely to enhance the market position of these firms. For example, Indian government subsidies to the agricultural sector, including subsidies on fertilizer and water, are often poorly targeted and benefit large landowners more than individual farmers. The result of such interplay between market failures and government failures is often greater inequality and more wasteful use of resources.

In practice, cooperation falls far short of generating either efficiency or equity, and governments are not able to correct the problem. Neither the decentralized, bottom-up decisions of individual economic agents in free economic markets nor the centralized, top-down decisions of governments, even when working together, can prevent waste or achieve social justice.

This insight is important since it implies that the long-standing debate between the mainstream right- and left-wing political parties is misguided. This debate is primarily about choosing between the size of the economic pie and the equal division of this pie. The underlying assumption is that (i) laissez-faire policies enable free economic markets to maximize the size of the economic pie (aggregate income), often at the expense of income equality, and (ii) government intervention can promote income equality, often at the expense of aggregate income. The democratic process is meant to give citizens the opportunity to choose where on this spectrum of aggregate prosperity versus equally distributed prosperity they wish to reside. The issue is framed entirely in terms of two pillars of coordination: the market and the state.

The Market, State, and Society as Collective Action Mechanisms

What the left- versus right-wing debate overlooks is the third pillar of coordination: society, which can work independently of the market and the state, but can also work alongside them (Rajan, 2019). By "society" we mean any collective of people living in some sense of community. A society can coordinate human activity through social norms, values, identities, and common narratives. Over the past century, the coordination domains of the market and the state have grown at the expense of society, particularly in developed countries. Care of infants and the elderly used to be performed by families and friends; now it is largely in the hands of private- or public-sector care providers. Healthcare was previously provided within small communities and now has been largely parceled out to the state and the market. The education of children has been transferred from communities to the state. Social security, unemployment support, and retirement provision have also been relinquished by society to the state.

These large-scale transfers of responsibility have far-reaching implications for human flourishing because the market, state, and society coordinate human action quite differently.

The market does so through anonymizable transactions. This gives people great flexibility in decentralized coordination, since they are free to switch their trading partners in pursuit of personal gain. But this flexibility comes at the cost of social cohesiveness. Personal gain can encourage collaboration when people are prosocial, but the prosociality generated by "doux commerce"[4] (the thesis that commerce acts as a civilizing force) is a truncated prosociality, limited to the promotion of commercial ends. There is no assurance that their prosociality, constrained by self-interest, is adequate for the collective challenges they face.

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[4] "Doux commerce" is the thesis that commerce acts as a civilizing force (Borg, 2021).

The state is in a position to recognize collective challenges at the national level, and it has policy instruments—tax and subsidy incentives, regulations, and laws—to induce people to coordinate their activities. This centralized coordination may come at the cost of personal agency, with potentially serious social consequences, as illustrated in the widespread rise of anger-driven populism by the left-behind. It may also involve less flexibility since the state has less access to local information than individuals do.

Society can coordinate activities at the meso-level, lying between the micro level of individual decisions that are coordinated by decentralized coordination by markets and the macro level of centralized coordination by the state. Social coordination in response to meso-level collective challenges can be encouraged through social norms, moral values, social roles within specified networks of association and hierarchies of power, and narratives of common purpose (as described below). Since this method of coordination works not only through external rewards and punishments from other members of one's social group but also through internal psychological incentives, the resulting coordination involves collaboration. Social cohesiveness is promoted, but at the cost of flexibility, since the relations among people are not anonymizable. The size and domain of social networks limit their flexibility. Within networks of love and care, there is flexibility in the channels and objectives of coordination since people who care for one another do so "come what may." Since humans exhibit great flexibility in the scale and scope of collaboration (also described below), the meso level can, in principle, adapt to changes in the scale and scope of collective challenges.

Insofar as collective challenges vary through time and across the economic, political, and social domains, collaborative flexibility is particularly important for the realignment and recoupling of collaborative capacities with collective challenges. This collaborative flexibility can be delivered by society responding directly to changing collective challenges or by society working through and alongside the state and the market. The state can deliver external mechanisms by enforcing cooperation, and the market can deliver self-interested cooperation, but it is society that delivers prosocial collaboration. Both the state and the market are governed by institutions that tend to be inflexible. Society is run by social norms, values, and identities that may be inflexible as well, but the potential for collaborative flexibility must come from society, if it is to come at all. Society is not invariably the best method of promoting collaboration. The market and the state each have their distinctive comparative advantages. But it would be foolhardy to rely on the market, the state, or some combination of market and state to address our collective challenges.

When the domain of the market and the state grows excessively relative to the domain of society, then people can feel a sense of disempowerment and alienation. This disempowerment arises from a lack of agency when people find themselves at the mercy of market forces and government interventions. The alienation comes from a lack of solidarity when communities falter because their social functions have been appropriated by the market and the state. Disempowerment and alienation are powerful drivers of social fragmentation. Today, in many developed and developing countries, this fragmentation expresses itself in the form of social discord generated by identity politics and grievance-driven nationalist populism (e.g., Eatwell and Goodwin, 2018).

The underlying claim is that society must be mobilized to work alongside the market and the state in order for collective challenges to be addressed appropriately (e.g., Rajan, 2021). This insight calls into question the conventional wisdom about the appropriate division of responsibilities among the participants in modern economies. According to this conventional wisdom, commonly advocated by both right- and left-wing parties in capitalist economies; consumers, businesses, and government bodies should all pursue distinct roles. Consumers should pursue their own consumption wants, businesses should pursue their own profits and the government should set the rules of the game so that the resulting economic activity is in the public interest.

These considerations imply that this division of responsibilities is misguided. The business of consumers is not just the gratification of consumption wants. The business of business is not just the pursuit of profit. And the business of government is not just keeping self-interested agents in check.

We now proceed to explore an alternative division of responsibilities that could enable all agents in the economy, polity, and society – at both the individual and collective levels – to work together

to achieve common goals that align people's collective challenges with their capacities. This division of responsibilities must enable the ongoing realignment and recoupling of capacities with collective challenges.

How to Make Human Coordination Work

To understand how to make human coordination work appropriately, we must recognize that, from time immemorial, humans have lived in small groups, interacting face-to-face to coordinate their actions to survive and reproduce. We have never lived as solitary individuals, with our individual abilities and preferences, making our individual decisions along the lines of *Homo economicus* of the economic theory that underlies the conventional understanding of how economic markets work or *Homo politicus* of the political theory that underlies the conventional understanding of how representative democracy works, by representing individual interests and goals. Throughout human history we have always lived in dazzling varieties of overlapping small groups. In the early hunter-gatherer societies, these groups were centered around distinct collective challenges, such as childcare, hunting, gathering, defense, and so on. The cohesiveness of these groups relied more on collaboration than cooperation.

These groups have kept constituting and reconstituting themselves in response to the circumstances they faced. Environmental changes required the formation of new groups to promote survival and propagation. As *Homo sapiens* left the African continent and populated the rest of the world, the nature of their life tasks adapted to their new environments. With the invention of agriculture, humans invented new forms of social organization, building complex social and political hierarchies within large agrarian states. With the industrial revolution came yet new ways of organizing societies, focused on factories in urban centers that were separated from home life. We are currently in the midst of a digital and biotech revolution that is engendering yet further innovations in our society. These massive changes bear witness to our prodigious capacity for collaborative flexibility.

Throughout all these social transformations, our reliance on small social groups has continued. These social groups are the foundation not only of our societies, but also our political and economic systems. They are not only the basis for our families and friendship circles, but also for our workplaces, political units, military, schools, religious institutions, and philanthropies. Small social groups are built through interlocking personal relationships. Collaboration results when these relationships are based on compassion and lovingkindness, when individuals acknowledge one another and their interconnectedness with respect, open-mindedness and a predisposition to support one another. Without the small social groups, the larger organizations cannot thrive.

This lesson becomes obscured when our systems generate great disparities of power, because then the powerful have possibilities to instrumentalize the powerless with impunity. The central importance of small social groups for human collaboration is also obscured when economic markets are allowed to dominate our collaborative ventures. The reason is clear: Economic relations are transactional. Transactions under voluntary exchange are meant to promote individual self-interest by making all parties to the exchange individually better off. Economic transactions are not designed to promote collaborative personal relationships.

Since the Industrial Revolution to the present day, a conventional wisdom has taken hold in developed and developing countries to address social problems in terms of inputs and outputs. Human capital, physical capital, financial capital and environmental services are all views as inputs to a production process, whose outputs are meant to satisfy our needs and wants. The focus is on individual decision-making "agents" and the flows on inputs and outputs between them. Human relationships fade from view.

This framework is appropriate when success depends primarily on the flexibility generated through anonymous transactions, in which people are interchangeable for one another. For social relationships in collaborative groups, people are not interchangeable. Quite on the contrary, the relationships exist because the people thereby connected are each essential for the maintenance of the relationships. People's purposes may well be shaped by the groups to which they belong, but their

identities are not interchangeable. On this account, the broad-based intrusion of economic relationships into spheres requiring collaboration – such as in the structure of welfare states – commonly leads to failure (Cottam, 2018).

The small groups, constituted by networks of personal relationships, are the building blocks of human collaboration in all domains of human life, as shown in Figure 5. Four domains are pictured: (1) the **environment**: the natural world within which all life unfolds, (2) **society**: the totality of all social relations among people living in persistent interactions with one another, (3) **polity**: the set of social and political relations and institutions concerned with the allocation of power, and (4) **economy**: the set of social and economic relations and institutions concerned with the allocation of resources, production, distribution, consumption and exchange of goods and services. These four domains are nested within one another.

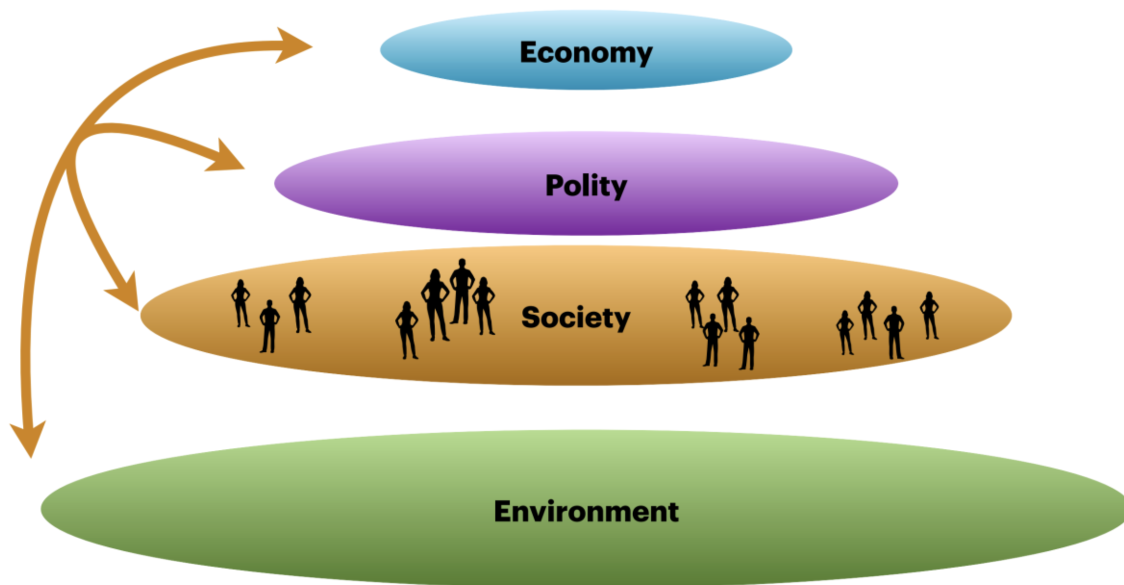

Figure 5 The Social Building Blocks of Life-Domains: The figure describes how the economy functions within the bounds set by the polity (including government), society and the natural environment. The arrows indicate that small social groups are the basis for human organization in all four domains.

We now consider mechanisms of collaboration that connect these life-domains in the process of addressing collective challenges through the mobilization of collective capacities.

Mechanisms of Collaboration

In practice, people achieve collaboration through the integration of two sets of mechanisms: (a) *internal mechanisms*, which operate "inside the head," that is, psycho-social forces that induce different people to contribute to a common purpose by participating in the welfare of a social group and (b) *external mechanisms*, which operate "outside the head," that is, through social and political institutions that generate external incentives to induce people to contribute to a common purpose. Whereas the internal mechanisms give rise to intrinsic rewards and punishments that induce people to serve the welfare of their groups, beyond their enlightened self-interest, the external mechanisms give rise to extrinsic rewards and punishments for this purpose.

"Narrow self-interest" may be defined as the pursuit of one's own payoffs, taking the behaviors of all other decision-makers as given. "Enlightened self-interest" denotes the pursuit of one's own payoffs, taking the responses of other decision-makers to one's own behavior into account. A person who sacrifices personal gain to benefit someone else in the expectation of direct reciprocity—"if I help you, you will help me"—is acting out of enlightened self-interest. Sacrificing personal gain in expectation of indirect reciprocity—"if I help others, I will gain a reputation for being helpful, which will induce others to help me"—is also pursuing enlightened self-interest. Cooperation is driven by

self-interest, both narrow and enlightened; collaboration, by contrast, involves pursuing the goals of one's social group beyond all self-interest.

Collaboration in the spirit of recoupling rests critically on two drivers of human flourishing: solidarity and agency. The solidarity that binds social groups – from the small (families) to the large (nations) – may be called "inward solidarity". It is responsible for in-group cohesion. Recoupling at the large scale – such as the global scale required to address climate change – calls for solidarity beyond the current boundaries of group identities. This type of solidarity rests on tolerance, respect and concern for "strangers," people lying completely outside our bonds of affiliation and care. This may be called "outward solidarity."

Furthermore, collaboration also calls for the sense and exercise of agency, enabling people to act on their solidarity. Accordingly, "inward agency" is empowerment to contribute to one's social groups, whereas "outward agency" drives strangers to collaborate in response to shared challenges.

The internal and external mechanisms of collaboration all serve to shape solidarity and agency in ways that promote the dazzling varieties of collaboration that couple our collective capacities with our collective challenges.

In order for collaboration to be created and maintained sustainably, the internal and external mechanisms must work in tandem, reinforcing one another. What motivates us inside the head must be reinforced by what drives us outside the head. This is so for both intra- and interpersonal reasons. Intrapersonally, our motives vary through time, depending on the social, political and environmental contexts we face. Thus we need external mechanisms to modify our contexts and thereby keep our collaborative efforts alive when our motives pull in the opposite direction. Interpersonally, individuals in a social group differ in terms of their collaborative propensities, and the external mechanisms are there to ensure that group cohesion is not undermined through the unhelpful behavior of free riders.

The integration of the internal and external mechanisms of collaboration via solidarity and agency in pictured in Figure 6.

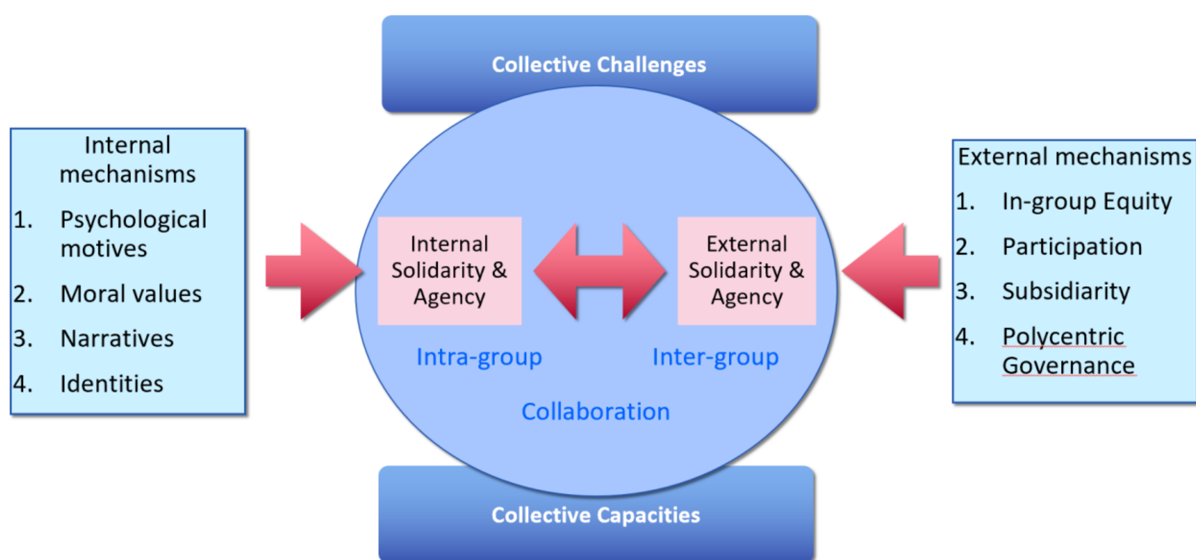

Figure 6: Integration of Internal and External Mechanisms of Collaboration

The figure the main themes underlying the recoupling thesis: (1) We address our collective challenges by coupling our collective capacities with these challenges (at the appropriate scale and scope). (2) This process relies critically on collaboration, since cooperation from self-interest is generally inappropriate or insufficient for tackling our collective challenges. (3) Collaboration rests primarily on solidarity and agency in social, political and economic groups. Within-group cohesion calls for internal solidarity and agency, while across-group partnerships require outward solidarity

and agency. (4) Collaboration emerges sustainably when the internal and external mechanisms of collaboration work in harmony. This implies that the resulting intra- and inter-group collaboration, resting on inward and external solidarity-agency nexus, must also be in consonance with one another. Thereby the figure can serve as a check list for all human groups, whether formal or informal, for tackling their collective challenges.

In what follows, we consider first prominent internal mechanisms, second essential external mechanisms, and finally the requisite interaction between them.

Internal Mechanisms of Collaboration

The internal mechanisms of collaboration are the psycho-social forces that drive solidarity and agency, both inward and outward. Let us focus on three particularly important inward mechanisms: (a) psychological motives, (b) moral values, and (c) narratives.

Many of our psychological motives are social, capable of generating agency-driven solidarity and thereby driving collaboration. Moral values can be understood as instruments that guide psychological motives toward collaboration. Finally, narratives are devices whereby moral values are tied into a broader account of reality, within which these values are substantiated and motivated. Of course, motives, values and narratives need not necessarily create the collaboration that couples our collective capacities with our collective challenges. There may be misalignment in scale and scope. Beyond that, motives, values and narratives can also be mobilized for conflict. In what follows, we will briefly summarize how these internal mechanisms work and then explore how they, alongside the external mechanisms, can serve recoupling.

Psychological Motives

In motivation psychology, a motive is a force that gives direction and energy to one's behavior, thereby determining the objective, intensity, and persistence of the behavior (Elliot & Covington, 2001, following Atkinson, 1964). There are many ways of classifying motives. For example, McClelland, et al. 1953) and McClelland (1967) focused on three motives: affiliation ("need to be liked"), achievement ("desire to do something better/more efficiently"), and power ("desire to have an impact, to be strong, influencing people"); Jutta Heckhausen (2000) identified five motives: achievement, affiliation, power/status, aggression, and prosocial altruistic behavior; Bruckmüller and Abele (2013) identified the motives of agency and communion; and Gilbert (2009, 2013) highlighted the motives of threat/self-protection, seeking/acquisition, and affiliation/contentment/soothing.

For the purpose of understanding an array of economic decisions, it is useful to highlight the following motives:

Care: which is concerned with nurturance, compassion, and caregiving (Weinberger et al., 2010),

- Affiliation: related to the desire for social approval (McClelland 1967; H. Heckhausen, 1989; Heckhausen & Heckhausen, 2010),

Achievement: related to the desire to do something better or more efficiently than before, particularly with reference to socially valued activities (Atkinson & Feather, 1966; J. Heckhausen & Heckhausen, 2010; McClelland et al., 1953; Weiner, 1990),

- Consumption-seeking: aimed at the satisfaction of appetitive material wants, is close to the standard economic conception of utility from consumption, but does not receive much attention in the motivation psychology literature (e.g., McDougall's (1932) propensity for foraging and ownership, Reiss' (2004) desire for eating, and Gilbert's (2013) seeking drive, an acquisition focused system,
- Power and status-seeking: related to the desire for influence and social standing (H. Heckhausen, 1989; J. Heckhausen, 2000; Heckhausen & Heckhausen, 2010),
- Threat avoidance: related to the emotion of fear (Lazarus, 1991; McDougall, 1932; Thorndike, 1898; Lewin, 1936; Hull, 1943; Murray, 1938; and Trudewind, 2000), and

- Threat approach: related to the emotion of anger (McDougall, 1932; Murray, 1938; Heckhausen, 1989; and Reiss, 2004).

Regarding these seven motives, care and affiliation are explicitly prosocial, inducing people to promote the well-being of others independently of one's enlightened self-interest. The other motives can also be channeled toward collaboration (as well as conflict). For example, the achievement and status-seeking motives can reflect the desire for prestige, attained through fulfilling a social purpose; threat avoidance and threat approach motives can promote collaboration when directed toward actions that undermine destructive competition or dominance.

The activation of these motives is context-dependent. Cooperative social settings (such as ones that promote teamwork) give rise to prosocial motives, which in turn contribute to the cooperative social settings. The external mechanisms of collaboration can provide contexts that promote the internal collaborative mechanisms. Cooperative settings can be empirically identified independently of the motives that they generate. For example, Bosworth, Singer, and Snower (2016) show how strategic complementarities (whereby one person's contribution to a common purpose enhances the capacity of others to contribute to this purpose as well) can elicit prosocial motives.

Social challenges at different levels—from micro challenges in the family to macro challenges at the national and international level—call for collaboration at these different levels. Recoupling our capacities with the challenges we face, in both scale and scope – whether in response to a pandemic or a war or food insecurity – invariably involves the mobilization of collaborative psychological motives. When appropriately mobilized, these motives induce people to address such challenges collectively, which invariably involves subordinating one's self-interest to the group interest through agency-driven inward solidarity and connecting group interests through agency-driven outward solidarity. Such mobilization is possible since psychological motives are a flexible instrument for collaboration, which can be put to work at diverse scales and scopes.

Moral Values

Due to the human flexibility in our collaborative capacities – enabling us to be self-serving under some conditions and altruistic under others – it is inevitable we should experience an ongoing conflict between pursuing our self-interest within our social group and pursuing the interests of the group. As noted, the functional purpose of moral values is to promote collaboration within specified social groups and to suppress destructive selfishness. It is difficult, if not impossible, to conceive of moral values that do not serve one of these two purposes. After all, morality is concerned with identifying right and wrong behavior patterns, governing our interactions with others in ways that promote coordination beyond enlightened self-interest, and preventing conflict.

For example, fairness – listed as a universal value both in Haidt's moral foundations (Haidt, 2012) and Schwartz's values circumplex (Schwartz, 1994) – is critical for collaboration, since it ensures that resources are distributed equitably, creating a sense of social justice and reducing the potential for conflict. Care (another universal value appearing in both Haidt's and Schwartz's accounts) also promotes collaboration since it induces people to show compassion for the suffering of others and to participate in each other's flourishing. Moral values such as responsibility and accountability discourage destructive competition, ensuring that individuals are held responsible for their actions and accountable for their decisions.

Moral values activate psychological motives promoting collaboration among members of the reference group. In addition, they drive collaboration at specified levels, which may be aligned with the levels at which collective challenges are faced. It has been argued that the problems of collaboration are often similar across cultures —for example, in the allocation of resources among kin, coordination to mutual advantage within social groups, reciprocal exchange without free riding, and conflict resolution through hawkish and dovish displays, property rights, and norms of fair resource division (Curry, Mullins & Whitehouse, 2019)—and thus the moral values associated with such collaboration problems are also present across cultures (Curry, 2016; Joyce, 2006).

Narratives

Narratives are "mental representations that summarize relevant causal, temporal, analogical and valence information" (Johnson, Bilovich, and Tuckett, 2022). They enable us to make sense of our environment, focus attention on particular events and characters, motivate action by associating moral values and social relationships, assign social roles and identities, define power relations and convey social norms (Akerlof & Snower, 2016). Narratives are the frames that transport moral values and activate psychological motives to encourage collaboration and discourage conflict.

"Conviction narratives" enable us to make conditional predictions concerning the consequences of our actions and thereby give us the conviction to act (Johnson, Bilovich and Tuckett (2022). Conviction arises when the narratives induce us to form beliefs about what will happen as a result of our actions and combine these beliefs with the moral values guiding our actions. The degree to which we are convinced of the conditional predictions generated by our narratives depends on the emotions that the narratives evoke, the degree to which the narratives reduce anxiety in the presence of uncertainty, our perception of the plausibility of the narratives, and our trust in others who believe in the narrative (Tuckett & Nikolic, 2017).

Narratives arise in the social groups where the associated beliefs are communicated. By linking beliefs with moral values, narratives activate psychological motives that lead to action. Narratives – like the motives and values that they draw on – are flexible instruments for encouraging collaboration in response to a collective challenge. They do so in various interlocking ways. First, they provide a compact and compelling way to create a shared understanding of the collective challenge, explain its context and illustrate its impact on individuals and communities. For example, documentaries such as "An Inconvenient Truth" by Al Gore (2006) used a narrative to create a shared understanding of the problem and convey the urgency of climate action. Second, narratives can evoke emotional engagement and motivation as motivators for collective action. For example, testimonies during the HIV/AIDS epidemic mobilized collective efforts and resources to prevention and treatment (Farmer, 1999). Third, narrative often feature role models or success stories, indicating how individuals or communities have successfully collaborated to address a collective challenge. Fourth, narratives can provide a roadmap for action, outlining steps that individuals or groups can take collectively to address a challenge. For example, the Paris Climate Agreement can be viewed as a narrative that outlines a global collaborative effort with specific goals and commitments. Fifth, by presenting diverse perspectives, narratives can create a space of dialogue and collaboration among people with different experiences and viewpoints. For instance, StoryCorps records personal stories to promote understanding among individuals from diverse backgrounds (Isay, 2010). Finally, narratives can contribute to the formation of social identities, which become the basis for collaboration – a topic to which we now turn.

Social Identity

Social identity refers to the part of an individual's self-concept that is derived from membership in social groups. People's categorization of themselves and others into social groups influences their perceptions, attitudes and behaviors (Tajfel and Turner, 2001). Social groups fulfill basic psychological needs underlying human motives, such as a need for belonging (associated with the affiliative and caring motives). Social identities are shaped by moral values, providing a moral framework for group membership. Narratives contribute to the formation of social identities by creating a shared story within a social group, construct the group's history and shape its members' understanding of their place in the world (McAdams, 2001).

Whereas mainstream economic models often assume that individuals make rational choices based on self-interest, identity economics recognizes that people's decisions are also shaped by their social identities, with far-ranging implications for the mobilization of capacities in response to collective challenges (Akerlof and Kranton, 2000, 2010).

Social identities can be leveraged to promote collaboration in addressing collective challenges. For example, emphasizing a common identity that transcends national differences can

promote global environmental stewardship. Social norms from within social groups can drive individuals towards collaboration in collective endeavors such as climate action (Cialdini et al, 1990). By encouraging dialogue and sharing of experiences, social identities can promote collaborative interactions between different groups, such as environmentalists, policymakers, business leaders and the general public (Pettigrew and Tropp, 2006). Social identities can also promote collaboration by highlighting incentives that are tied to group achievements and generating shared recognition for collective efforts and a sense of shared success (Kerr and Kaufman-Gilliland, 1994).

External Mechanisms of Collaboration

External mechanisms of collaboration comprise extrinsic incentives and constraints that induce people to act in the public interest. These extrinsic context-shapers generally involve rules promoting in-group cohesion and, where necessary, rules promoting good working relationships with other groups.

Within groups, two particularly important mechanisms are mechanisms ensuring (i) in-group equity and (ii) in-group participation. Both of these are essential for fostering the trust and inclusive opportunities that provide a conducive environment for collaboration. Workplace policies that promote diversity and inclusion, for instance, invariably recognize the importance of in-group equity and participation, often leading to improved problem-solving and decision-making in teams (e.g., Cox and Blake, 1991).

Between groups, collaboration often requires mechanisms that (iii) recognize the principle of subsidiarity and (iv) promote polycentric governance. Subsidiarity involves decentralized decision-making, pushing authority to the lowest feasible level, while polycentric governance involves multiple centers of decision-making and authority. These mechanisms can enhance collaboration by allowing groups to maintain autonomy while coordinating efforts for common goals.

Let's consider each of these external mechanisms in turn, examining how they promote the solidarity and agency underlying effective collaboration.

In-group Equity

In-group equity is characterized by fair decision-making processes, involving both procedural fairness (ensuring that the decision-making process is unbiased and provides opportunities for input) and distributional fairness (concerning the equitable distribution of resources or outcomes among individuals).[5] Such systems aim to create a sense of solidarity among participants and empower individuals by ensuring that everyone has a stake in the collaborative efforts.

Needless to say, in-group equity does not necessarily imply equally distributed authority and power. All that is required is legitimacy for the group's power structure, meaning consent of the governed, usually obtained through fairness and equitable distribution of contributions and benefits.

Procedural fairness is generally understood to involve the following aspects:

- *Impartiality*: Impartial decision-making involves treating all individuals or groups without favoritism or bias, considering only relevant factors. In a hiring process, for example, impartiality ensures that candidates are evaluated solely on their qualifications and skills, irrespective of personal connections.
- *Transparency and accountability*: Transparent decision-making processes provide clear information about the criteria used and the reasoning behind decisions, promoting accountability. Such processes contribute to a sense of solidarity based on shared values and principles. Accountability mechanisms empower individuals by providing avenues for holding decision-makers responsible. To ensure that transparency leads to accountability, it is important to differentiate between individual transparency (focusing on failures of individuals, such as isolated cases of corruption) and institutional transparency (addressing systemic flaws), since these relate

[5] These two aspects of fairness correspond to the second and third of Ostrom's Core Design Principles (Ostrom, 1990).

to individual and institutional accountability. "Opaque transparency," involving the dissemination of information that does not uncover how institutions make decisions and how they evaluate their impacts, may not lead to institutional accountability (Fox, 2007).

- *Inclusivity*: Inclusive decision-making involves considering and incorporating diverse perspectives, ensuring representation and participation from various stakeholders. Inclusive decision-making fosters a sense of belonging and shared ownership of decisions, leading to increased solidarity among participants. When individuals perceive that their perspectives are valued, they are more likely to collaborate cohesively. Inclusivity empowers individuals by providing them with a sense of agency and influence in shaping outcomes. This empowerment contributes to a stronger commitment to shared goals (Young, 2002).
- *Consistency*: Consistent decision-making ensures that similar cases or individuals are treated similarly, avoiding arbitrary distinctions. In a legal system, for example, consistency means applying the same laws and standards to all individuals, regardless of their background or status.

Distributional fairness, with respect to the contributions and benefits from collective action, creates a sense of justice and trust among participants. This fairness promotes solidarity as individuals perceive that everyone is treated with equity and respect. Equitable distribution of benefits also ensures that all participants feel valued and included. This sense of fairness empowers individuals, encouraging active engagement and a commitment to collaborative efforts (Sen, 1999).

At the micro level, examples of equitable systems that can generate solidarity and empowerment include cooperative housing models, where residents collectively manage and own housing units. This often leads residents to experience a sense of solidarity, as they share responsibilities on communal decisions, and a sense of agency, by giving residents control over their living environment. At the macro level, fair trade cooperatives in the global South often adopt participatory and democratic decision-making structures, ensuring equitable distribution of benefits, thereby promoting solidarity amoing producers and consumers and empowering producers by giving them access to markets.

In-group Participation

In-group cohesion and collaboration usually also requires some opportunities for group members to participate in decision-making processes. Such participation usually involves the following key components, some of which overlap with procedural fairness:

- Shared responsibility: When participants share responsibility for both the decision-making process and its outcomes, they generally experience solidarity and agency, since everyone has a stake in the success of the decision.
- Collaborative problem-solving: When group members work together to find solutions, they often gain a sense of mutual support and unity.
- Open communication: Open communication channels facilitate the exchange of ideas and information.
- Inclusivity: All individuals affected by a decision are included, directly or indirectly, in the decision-making process.

For example, participatory democracy is a system of governance in which citizens actively participate in decision-making processes, allowing direct involvement in shaping policies. Power is distributed across various levels, allowing local communities to make decisions that directly impact their lives. When individuals actively contribute to shaping policies that affect them, they have a sense of agency and a sense of solidarity often emerges as they work collectively toward common goals.

Subsidiarity

Since small social groups are the basic building blocks of collaboration but many collective challenges involve need to be tackled through collaboration at larger scales, such collaboration commonly involves external mechanisms that promote cooperative relations among groups. In order to achieve the requisite agency in inter-group relations, as well as solidarity among groups, it is

important to respect the principle of subsidiarity. This principle suggests that decisions should be made at the most local or decentralized level possible, only moving to higher levels of authority when lower levels cannot adequately address the issue.

Decentralized decision-making empowers local entities by giving them a direct role in shaping policies that impact their community. This enhances the sense of agency and self-determination. Communities working together to address their unique challenges also gain a sense of solidarity through shared responsibility.[6]

Polycentric governance

Polycentric governance connects small social groups into a network involving larger-scale entities, including institutions, organizations, and other higher-level actors that work together to address common challenges (Ostrom, 2010a,b).[7] Each decision-making center within the network can make and enforce rules within its jurisdiction. The interactions within the network enable local autonomy, foster collaboration across governance levels, and facilitate the coordination of the network across scales, from micro to macro. This framework recognizes the importance of diversity in institutions, decision making authorities and governance arrangements to address the diversity of collective challenges that arise at various scales. To coordinate decisions across groups, polycentric governance involves monitoring of agreed behaviors; graduated responses to prosocial and anti-social behaviors; and fast and fair conflict resolution.[8]

Polycentric governance has the following core features:

- *Local autonomy and self-governance*: By empowering small social groups and communities to manage their own resources and make collective decisions that directly affect their lives, polycentric governance allows for context-specific solutions and fosters a sense of ownership and responsibility among community members (Cottam, 2018; Poteete, Janssen, and Ostrom, 2010).
- *Adaptive capacity*: Polycentric governance facilitates learning and adaptation by allowing for experimentation, flexibility, and the ability to adjust governance approaches based on feedback and changing conditions. The resulting adaptive capacity enables continuous improvement and innovation in the management of collective goods (Cottam, 2018; Folke, Colding, and Berkes, 2003).
- *Macro-micro integration*: Polycentric governance acknowledges that collective challenges occur at multiple scales. Global challenges such as climate change require governance arrangements that can address these challenges at the appropriate levels, from micro to macro, providing local agency, participation in higher-level decision making, and coordination at the macro level (Biermann & Kim, 2020).
- *Innovation*: Polycentric governance can foster innovation by providing an enabling environment for research and development, promoting knowledge sharing, and facilitating collaborative networks among stakeholders.
- *Coordination mechanisms*: Polycentric governance involves coordination mechanisms that connect small social groups into large-scale management of collective goods. These mechanisms can include networks, forums, or institutional arrangements that enable communication, negotiation, and the resolution of conflicts among different levels and scales of governance (Ostrom, 2007).
- *Collaborative arrangements*: Polycentric governance facilitates information sharing, knowledge exchange, and joint problem-solving, enabling diverse stakeholders to work together towards common goals (McGinnis and Ostrom, 2014).

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[6] Subsidiarity mirrors Ostrom's seventh Core Design Principle.
[7] Polycentric governance is Ostrom's eighth Core Design Principle
[8] These conditions correspond to the fourth, fifth and sixth of Ostrom's Core Design Principles, as generalized by Wilson, Ostrom and Cox (2013).

Many current structures of economic, political and social organization are not equitable and participatory in the above senses. Governments in the so-called "representative democracies" are no longer truly representative since most citizens are no longer involved in the design and implementation of the rules they are required to live by. Political leaders and policymakers usually respond to problems by handing down centrally planned solutions based on generic diagnoses rather than involving their citizens in policy deliberations. Business leaders are sensitive to their customers and occasionally to their other stakeholders, but not necessarily in the spirit of participation for the common good. Sometimes the sensitivity involves influencing customer tastes and exploiting their cognitive biases through advertising and attention capture in digital networks.

Neither the price system in the economic domain, nor the current trappings of democracy in the political sphere, nor informal social networks provide any assurance that people living in small groups develop the capacities for participation in collective decisions at the appropriate scale and scope. There is also no assurance that the bounds of affiliation and solidarity are well-adapted to the existing collective challenges. On this account, local autonomy and self-governance is often ignored or channelled in maladaptive directions. The macro-micro integration does not take place, adaptive capacity is not built, collectively desirable innovation does not take place, and the appropriate coordination mechanisms and collaborative arrangements are missing.

Integrating the Internal and External Mechanisms of Collaboration

As noted, the successful and sustainable coupling of collective capacities with collective challenges requires a holistic approach that integrates the internal and external mechanisms of collaboration. A full treatment of this integration lies beyond the scope of this article, where only some prominent themes can be highlighted.

All successful political movements have relied on harmonizing the internal and external mechanisms. The American civil rights movement is an apt example. Dr. Martin Luther King, Jr., sought to overcome the racism that was built into the mindsets and institutions across the United States. This problem may be understood in terms of a misalignment of collective capacities with collective challenges, since discrimination against African Americans clearly undermined the economic, social and political fabric required for the United States to address a large array of other collective national challenges, such as maintaining law and order, providing public goods and services equitably to its citizens and equitably distributing income and wealth. In order to couple the collective capacities of the U.S. citizenry with their collective challenges, it was important to address the problem of racism in a way that was compatible with American patriotism, seeking to create unity of national purpose inside-the-head to be reinforced by civil rights legislation outside-the-head. This was in fact the approach that Dr. King chose. He frequently emphasized the need to love and forgive: "Love is the only force capable of transforming an enemy into a friend" (King, 1963/1981, p.52). Furthermore: "Hate cannot drive out hate; only love can do that" (King, ibid., p. 51). The underlying message, that the mobilization of collective American capacities was not just instrumentally useful but also a moral imperative, was articulated most forcefully in his final speech: "I have a dream that one day this national will rise up and live out the true meaning of its creed: 'We hold these truths to be self-evident, that all men are created equal" (King, 1963). Instead of nursing grievance, Dr. King appealed to the American Dream; instead of pursuing the "victim-aggressor narrative," he adopted the "brother-and-sister" narrative. This approach is precisely in the spirit of recoupling.

On an abstract level, it is straightforward to adduce various principles whereby various internal mechanisms can be connected to the external mechanisms:

- The psychological motives of care and affiliation can be integrated with participatory decision-making by ensuring that individuals feel that their input is values and contributes to decision outcomes (Deci and Ryan, 1985). Narratives about the urgency of addressing climate change can promote this integration.

- The moral value of environmental stewardship can be mobilized by fair distribution of contributions and benefits within collaborative groups (Stern, Dietz and Kalof, 1993).
- Identity formation can be shaped in consonance with nested group decision-making by recognizing and respecting diverse identities within larger collaborative structures, fostering a sense of belonging across group boundaries (Tajfel and Turner, 2001).
- Subsidiarity can align with collaborative identity formation by recognizing the importance of decisions being made at the most local level possible, respecting the identities within smaller collaborative units (Vischer, 2001).
- Polycentric governance can align with contextualized and localized stories to shape decisions on a small scale, thereby contributing to a broader narrative of collective action (Ostrom, 2005).

Comprehensive integration involves recognizing the interplay between internal and external mechanisms and tailoring collaborative efforts to specific collective challenges, such as climate change.

Implications for Policy Making and Business Practice

The implications of this analysis for policy making and business are far-reaching. This section highlights some of the main themes.

Scale Alignment

A host of our collective challenges—at local, national, regional, and global levels—can only be successfully addressed through appropriate coordination between policymaking and business. Examples of such collective challenges include financial instability, misinformation, digital manipulation, cybersecurity, food insecurity, water shortage, pandemics, energy insecurity, climate change, and biodiversity loss.

Tackling each of these collective challenges calls for an answer to the following questions: Who are the appropriate stakeholders whose collective capacities need to be aligned with the challenges? At what scale must this alignment take place? The answer invariably involves a coordinated response from policymakers and business leaders in conjunction with representatives of the population groups affected by the challenges in question. Where the challenges are global, the stakeholder coordination needs to be global as well. Regional challenges call for regional coordination. Nowadays such coordination is frequently missing.

The underlying problem is simple. The current pursuit of commercial goals by businesspeople and political goals by governmental bodies rarely leads to the alignment of capacities and challenges at the requisite scale with the requisite stakeholders. Take the challenge of climate change. Despite countless business promises consistent with corporate social responsibility, there is incontrovertible evidence that business activity is contributing to the fateful march of the world economy toward a climate precipice. The pursuit of profit, as currently conceived, is environmentally unsustainable. Despite countless political climate action initiatives, governments have not been able to create a legal, regulatory, or policy framework that corrects this problem. The pursuit of votes within current political processes leads to unsustainable outcomes.

The carbon emission targets that governments set for businesses are generally incompatible with the regulations that these governments impose on the businesses in that country. If all businesses complied with all carbon emission regulations, the resulting carbon emissions would not reach the specified national targets.

Business leaders often claim, with some justification, that emission regulations contribute to the underlying problem because they do not give businesses a predictable regulatory context for a feasible transition to carbon neutrality. Under these circumstances, businesses divest themselves of dirty assets to companies who are not subject to the regulations. This is one source of the “carbon leakage” problem. Policy makers often claim, again with some justification, that even when businesses are

given the transition periods that they request, they make inadequate progress toward transition. Business leaders claim that many emission regulations are inefficient, while policy makers claim that business leaders continually seek to evade regulations, thereby inducing an onerous regulatory policy response. Business leaders claim that emission regulations are often not in tune with the latest technical knowledge about carbon abatement, while policy makers claim that the technical information supplied by business leaders often serves business interests and leads to regulatory capture. These difficulties are all symptomatic of stakeholder-scale misalignment. The operating system of business and politics does not permit viable solutions to the climate crisis.

The problem cannot be solved through goodwill alone, nor through marginal adjustments of green policies and green business practices. Corporate leaders have a fiduciary duty to their shareholders, who cannot be relied on to sacrifice financial gain for environmental gain, even when the environmental gain far exceeds the financial gain. National policy makers have a duty toward their national electorates, who also cannot be relied on to prioritize global environmental gain over national livelihood gain. The policymakers and business leaders operate as separate agents, each pursuing their own goals, whereas they should be operating as a unified agent pursuing a common goal with regard to the systemic challenge of climate change. Needless to say, this does not imply that a world government should take over the job of business or that a global business should take over the job of government, since representative democracies and competitive businesses, operating with the appropriate social norms and values, have comparative advantages that deserve to be exploited within an appropriate governance framework.

On the basis of our analysis, the way forward can be summarized in a few simple, but pathbreaking, steps. First, policy makers, business leaders, and citizens need to recognize the symptoms of stakeholder-scale misalignment. Only then is it possible to acknowledge the necessity of seeking solutions that involve coordination across the economic, political, and social domains, instead of the repeated, well-meaning but ineffectual endeavors of business leaders, politicians, and social activists to act independently of one another.

Second, seeking solutions at higher stakeholder scale means distinguishing clearly between environmentally friendly decisions within the current operating system (i.e., the current legal, political, regulatory, contractual, and social *status quo*) and those that are made under a new operating system. Stakeholder scale alignment can only be achieved within a new operating system. Politicians, business leaders, and civil society representatives should recognize that engagement in negotiations over the new operating system is one of their most important political, economic, and social responsibilities. These negotiations must be conducted in the spirit of systems thinking and Ostrom's Core Design Principles.

Third, systems thinking involves recognizing interdependencies and feedback loops between social, political, economic, and ecological systems, understanding the nonlinear, dynamic nature of systems (where small changes can lead to large consequences), and acknowledging that complex systems often exhibit emergent properties that cannot be understood by analyzing the individual properties alone (Meadows, 2008; and Sterman, 2000). Systems thinking has important implications for policy making and business practice, as it calls for:

- (i) integration of policy frameworks across the economic, political, social and environmental domains;
- (ii) stakeholder engagement across these domains to understand multiple perspectives and cocreate systemically effective policies;
- (iii) long-term perspectives that take into account the long-term nature of most systemic challenges and the need for sustainable solutions;
- (iv) conceptual pluralism, which takes into account the need for a diversity of conceptual frameworks in order to respond resiliently to unpredictable events that arise because decisions are made under radical uncertainty; and
- (v) adaptive management across domains, emphasizing iterative learning and feedback, so policies can readily adapt to evolving knowledge and unpredicted system behavior (e.g., Meadowcroft,2009; Pahl-Wostl, 2007).

For business, it also involves (i) life-cycle thinking, taking into account the entire life cycle of products and services to identify climate impacts; (ii) circular economy thinking; (iii) emphasis on adaptability and resilience as criteria for business success, alongside efficiency (Geels, et al 2020; Loorbach and Wijsman, 2013).

Scope Alignment

Many of our collective challenges involve threats to and opportunities for multiple dimensions of flourishing, which we have characterized simply in terms of solidarity, agency, gain, and environmental sustainability. For example, climate change poses a threat not only to our environment, but also to community solidarity (due, for example, to forced migration), personal and community empowerment (since the economic and social disruptions from climate change may leave people feeling helpless) and material livelihoods (since climate change alters the location of production and work, access to energy, food and water, as well as the composition of goods and services).

Disregarding some of these dimensions of flourishing can lead to the failure of climate policy. An example was President Macron's attempt to address the climate challenge through a fuel tax rise in 2018. While this tax was designed to reduce carbon emissions, its negative repercussions on the livelihoods of the working poor, the damage to communities relying on fossil-fuel-intensive employment, and the disempowerment of commuters were not adequately considered. The outcome of this policy was the protests of the *gilets jaunes* (yellow vests), which led to the abandonment of the fuel tax rise.

Addressing collective challenges at the appropriate scope requires a coordinated effort by policy makers and business leaders, accountable to representatives of the affected population groups. This coordination is often missing for a variety of reasons. One is that public policies are often designed in silos, with environmental policy commonly driven by economic policy measures that are formulated independently of welfare and social policy.

Another reason is that the various dimensions of flourishing do not enjoy comparable policy attention. Gain (primarily in terms of GDP) is measured consistently across countries and regularly through time, environmental variables are measured less consistently and regularly, while solidarity and agency receive at best cursory and superficial quantitative assessment. Consequently, policy makers are frequently unaware of issues that are of great concern to citizens. The nationalist populism in the United States and the United Kingdom that led to the election of Trump and the Yes vote for Brexit, arose in part from the anger of the people who felt socially alienated (Donald Trump's "Build a Wall!") and disempowered (Boris Johnson's "Take Back Control!"). Politicians who believed that "It's the economy, stupid!" and "You have never had it so good" were swept out of office (Eatwell and Goodwin, 2018).

Yet another reason for scope misalignment is that the fiduciary duties of business leaders focus on financial performance, rather than the social and environmental effects of business activities. Finally, a host of government failures (such as regulatory and bureaucratic capture) help explain why policymakers do not respond flexibly to non-financial threats to flourishing.

The guidelines for tackling scope misalignment are in many respects similar to those which address scale misalignment:

1. Multiple stakeholders who can mobilize the relevant collective capacities must be able to recognize the symptoms of scope misalignment.
2. These stakeholders must acknowledge the need to negotiate a new operating system that permits the alignment of collective challenges with collective capacities.
3. Stakeholders must engage in the requisite systems thinking, allowing an integration of policy and business frameworks across the various dimensions of flourishing.
4. Profit (the goal of business) needs to be redefined in terms of contributions to dimensions of flourishing so that flourishing gains become increments to profit while flourishing losses become decreases. Business leaders' fiduciary duties are to focus on this notion of profit. This

guideline can be implemented through a combination of tax-subsidy incentives and regulations.

5. The effectiveness of public policy should also be measured in terms of contributions to flourishing and t the duties of policymakers centred on these measures.
6. The flourishing-based measures of business performance should be consistent with those of public policy performance.
7. Business and government reporting and accounting is to be based on these measures.
8. Incentive and governance systems in business and public policy must be reconfigured accordingly.

Recoupling

Given that our economic, political, social, and natural environments are in a continuous state of flux, policy-making and business practice should be reoriented toward a continuous process of recoupling our collective capacities with our ever-changing collective challenges.

Public Policy

The major purpose of public policy is to induce people to work together in response to collective challenges. In mainstream economic analysis, this can be done directly through government interventions (such as regulations) or indirectly through incentives (such as taxes and subsidies or behavioral nudges). What has received relatively little attention thus far are policies to promote collaborative flexibility.

Such policies may be called "adaptability policies." They are essential to human flourishing in the face of unexpected crises and unexpected opportunities. As noted, people are flexible in the scale and scope of their collaborative capacities. Their internal mechanisms (such as motives, values, and narratives) and external mechanisms (such as polycentric governance and subsidiarity) promote collaborative flexibility since they can be employed at varying scales across economic, political, and social domains. While people have the wherewithal to collaborate flexibly in response to ever-changing collective challenges, their mechanisms for doing so are context dependent. *It is the job of higher-level entities, such as the government, to create contexts that induce collaboration at the appropriate scale and scope.*

At the global level, policies that enhance international cooperation and coordination can enhance adaptability, if these policies are formulated with adaptability in mind. International organizations such as the World Health Organization (WHO) and the International Monetary Fund (IMF) can help coordinate efforts and provide resources during crises. Policies that support global trade, investment, and migration can also enhance adaptability by increasing access to resources and knowledge across borders.

At the national level, policies that enhance adaptability may include investments in the appropriate kinds of education and training, social safety nets, and infrastructure. Education and training can help individuals acquire the skills needed to adapt to changing circumstances, while social safety nets can provide a buffer during times of economic hardship. Investments in infrastructure, such as transportation, telecommunications, and energy systems, can improve the adaptability of communities to shocks (World Bank, 2019). Policies that support innovation and entrepreneurship can also enhance adaptability by promoting the development of new technologies and business models (Acs & Audretsch, 1990). Adaptive social protection supports poor and vulnerable households by building their capacity to prepare for, cope with, and adapt to the shocks they face (World Bank, 2020).

At the regional and local levels, policies that enhance adaptability may include investments in local infrastructure, community development, and disaster preparedness. Regional and local governments may have a better understanding of local conditions and can tailor policies to meet the specific needs of their communities. Research shows that community development programs can enhance adaptability and social well-being by promoting collaboration and building social capital

(Putnam, 1993; Woolcock & Narayan, 2000). Disaster preparedness measures can also enhance adaptability by reducing the impact of natural disasters and other shocks (Hallegatte et al., 2016).

Business Practice

Corporate culture is the glue that enable workforces to collaborate in response to ever-changing challenges. By corporate culture, we mean a set of values, norms, and beliefs that guide the behavior of employees within an organization. Corporate culture shapes the social relationships among employees (e.g., Denison and Mishra, 1995; Schein, 2010; Truss et al., 2013).

Since corporate culture is meant to provide employees with a sense of belonging and purpose, it can motivate them to work toward a common goal. A collaborative corporate culture encourages employees to share ideas, solve problems together and make decisions as a team, thereby creating a sense of ownership. In a values-based corporate culture, employees gain a sense of pride from ethical behavior and fulfilling their social responsibilities. In large multinational companies, corporate culture can help employees overcome cultural differences and build a sense of teamwork that extends across geographic regions.

Regarding the common goal toward which corporate culture can motivate employees, the important questions in this regard are twofold: (i) Does the common goal address only the narrow, short-term financial interests of the company's shareholders and investors, or does it aim to tackle collective challenges at a higher level, encompassing the objectives of all of the company's stakeholders, including customers, employees, suppliers, and the local communities in which the company operates? (ii) If the latter, does the common goal only take account of the direct effects of the company's activities on its stakeholders, or is it also sensitive to third-party effects on the environment and society (e.g., environmental impacts that do not affect the company's immediate stakeholders or social impacts on communities that the company no longer works in, but that were part of its supply chains in the past)?

Companies are usually constrained regarding their answers to these questions. Most have a fiduciary duty to their shareholders, whose interests may not be aligned with the company's other stakeholders and third parties. Clearly, governments have an important role to play in aligning the interests of companies with those of society and the environment, by setting the legal responsibilities of companies, through targets (such as those for net zero emissions) and government policies (such as procurement conditions, taxes and subsidies) (Kelly and Snower, 2021).

Corporate culture also plays an important role in fostering collaboration and particularly collaborative flexibility since monetary incentives alone are generally not sufficient to promote such flexibility. The ability to keep realigning and recoupling one's collaborative efforts with continually varying challenges is often driven by the tacit knowledge of employees working at the grassroot level who understand the needs of the customers, capacities of suppliers, and plans of designers. This tacit knowledge is often not available to those who design the remuneration schemes.

Corporate culture is particularly significant and effective when: (i) the tasks require a high level of personal autonomy, so that the culture can induce workers to feel that their work is intrinsically rewarding; (ii) the tasks call for a high degree of creativity, so that the culture induces workers to experiment and learn from experience and (iii) employees are motivated strongly by nonfinancial factors, such as social responsibility (Deci, Koestner and Ryan, 1999; Pink, 2009; Schein, 2010). Beyond that, corporate culture can instill purpose and belonging when management incentivizes employees to take responsible roles both within society and for the environment.

Corporate culture can support collaborative flexibility in a wide variety of ways. A *flexible company* is a business organization that creates a flexible working environment and practices to accommodate and support the diverse needs of its employees. Flexibility in the workplace is the ability to adapt work arrangements, schedules, and locations to accommodate individual preferences, life circumstances, and work-life balance (Allen, Golden and Shockley, 2015; Gajendran and Harrison, 2007; Grant, Wallace and Spurgeon, 2013). An *agile company* focuses on customer-centric adaptability and iterative development to respond effectively to changing market conditions and customer needs (Dikert, et al., 2016; Rigby, Sutherland Takeuchi, 2016; Stettina and Horz, 2015).

The degree of flexibility and agility of companies can be influenced by government policy and adaptable policies (as considered above) are particularly relevant in this regard.

Concluding Remarks

In sum, most of the problems and opportunities that people face are collective challenges. These collective challenges occur on various levels, from micro (such as divorce and family feud) to macro (such as global warming), in multiple dimensions (solidarity, agency, gain and environmental sustainability), and in a variety of domains (economic, political, social, and environmental). To address these collective challenges, people need to engage in collective action at the appropriate scale and scope.

Collective action can take the form of cooperation (working with others to achieve one's own goals) or collaboration (working with others to participate in common goals). Most collective action involves collaboration since cooperation is hostage to the opportunistic changes in individual self-interests. Since collective challenges often arise unexpectedly, people can address them effectively through collaborative flexibility. In other words, people's group affiliations must respond to the variability in the levels of their challenges. Collaborative flexibility promotes an ongoing process of realignment and recoupling of human capacities with ever-changing collective challenges. Human flourishing depends crucially on collaborative flexibility in the context of polycentric governance.

A major purpose of public policy is to induce people to work together in response to collective challenges. This is usually conceived in terms of government interventions (such as regulations) or incentives (such as taxes and subsidies or behavioral nudges). What has received relatively little attention is "adaptability policies" to promote collaborative flexibility. Businesses can promote collaborative flexibility through various mechanisms, often associated with corporate culture. This flexibility can be shaped through adaptability policies.

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